

THE EFFECTS OF A PARENT EDUCATION PROGRAM  
ON PARENT ATTITUDES AND MANAGEMENT  
SKILLS AND ON THE SELF-CONCEPT AND  
BEHAVIOR OF THEIR LEARNING DISABLED CHILDREN

BY

STEPHEN LESLIE LARBITT

A DISSERTATION PRESENTED TO THE  
GRADUATE COUNCIL OF THE UNIVERSITY OF  
FLORIDA IN PARTIAL FULFILLMENT OF THE  
REQUIREMENTS FOR THE DEGREE OF  
DOCTOR OF EDUCATION

UNIVERSITY OF FLORIDA

1981

Copyright © 1982  
By  
Stephen Leslie Leacock

#### ACKNOWLEDGMENTS

I would like to express my appreciation to the committee members whose support and guidance made this dissertation possible. I would particularly like to single out Dr. Paul George for his constructive criticism and supportive actions. Also, thanks to Dr. Charles Deibus whose technical assistance and sense of humor were invaluable.

Special thanks are extended to my friend and colleague, Linda Wesley, for her steady support and assistance in helping me prepare this dissertation.

Lastly, I want to thank Penny Laymitt for her technical assistance in helping me complete this dissertation, for her moral support and encouragement, and most of all, for being my wife.

## TABLE OF CONTENTS

	Page	
ACKNOWLEDGMENTS.....	vii	
LIST OF TABLES.....	viii	
ABSTRACT.....	ix	
CHAPTER		
I	INTRODUCTION.....	1
	Statement of the Problem.....	2
	Significance of the Problem.....	3
	Definition of Terms.....	7
	Limitations of the Study.....	9
	Assumptions.....	10
	Hypotheses.....	11
II	REVIEW OF THE LITERATURE.....	13
	Parent Education.....	13
	Research on general aspects of parent education.....	17
	Dependence.....	38
	Affective.....	31
	Behavioral.....	43
	Design and Curricular Considerations.....	53
	Summary.....	58

CHAPTER		Page
III	METHODS.....	41
	Variables.....	42
	Design.....	42
	Method and Treatment Model.....	45
	The Sample.....	48
	Instrument Validity and Reliability.....	49
	Analysis of Data.....	78
	Data Collection.....	80
IV	RESULTS OF THE STUDY.....	83
	Changes in Parental Behavior Management Skills.....	88
	Children's Self-Concept.....	87
	Changes in Observed Classroom Behavior.....	88
	Additional Findings.....	91
	Summary of Findings.....	97
V	SUMMARY, CONCLUSIONS, RECOMMENDATIONS.....	100
	Discussion of the Service.....	102
	Conclusions.....	105
	Recommendations.....	109
<b>APPENDICES</b>		
I	PARENT NOTIFICATION LETTER.....	114
II	PARENT APPOINTMENT SLIP.....	115
III	BEHAVIOR MANAGEMENT VIEWPAGES.....	122

APPENDICES		Page
IV	VIDEOTAPE SCRIPT.....	129
V	FOUR-SIBBIS CHILDREN'S SELF-CONCEPT SCALE.....	135
VI	BEHAVIOR RATING CHART.....	138
VII	MEANS AND STANDARD DEVIATIONS FOR THE FOUR DEPENDENT VARIABLES.....	134
BIBLIOGRAPHY.....		140
BIOGRAPHICAL SKETCH.....		145

LIST OF TABLES

TABLE	Page
1. SCHOOL DEMOGRAPHIC INFORMATION.....	49
2. RESULTS OF THE PAIRED RESPONSES TASK FOR THE CONSISTENCY OF THE OBSERVANCE OF INAPPROPRIATE BEHAVIORS.....	70
3. FREQUENCY RESPONSES TO THE VIGNETTES.....	74
4. SUMMARY OF ANALYSIS AND DESIGN PROCEDURES.....	80
5. RESULTS OF THE MULTIVARIATE AND UNIVARIATE ANALYSIS OF PARENT ATTITUDE DATA.....	82
6. ANALYSIS OF VARIANCE RESULTS FOR BEHAVIOR MANAGEMENT VIGNETTE.....	84
7. ANALYSIS OF VARIANCE RESULTS FOR FIRM-BASED CHILDREN'S SELF-CONCEPT SCALE.....	87
8. ANALYSIS OF VARIANCE RESULTS FOR STUDENT BEHAVIOR CHANGE.....	89
9. ANALYSIS OF VARIANCE RESULTS FOR PARENT ATTITUDE SURVEY (CONTROL GROUP).....	92
10. ANALYSIS OF VARIANCE RESULTS FOR BEHAVIOR MANAGEMENT VIGNETTE (EXPERIMENTAL GROUP, BETWEEN SCHOOLS).....	93
11. ANALYSIS OF VARIANCE RESULTS FOR BEHAVIOR MANAGEMENT VIGNETTE (CONTROL GROUP, BETWEEN SCHOOLS).....	95

## TABLE

Page

12	ANALYSIS OF VARIANCE RESULTS FOR FIRST-GRADERS CHILDREN'S SELF-CONCEPT SCALE (EXPERIMENTAL GROUP, BETWEEN SCHOOLS).....	94
13	ANALYSIS OF VARIANCE RESULTS FOR FIRST-GRADERS CHILDREN'S SELF-CONCEPT SCALE (CONTROL GROUP, BETWEEN SCHOOLS).....	94
14	ANALYSIS OF VARIANCE RESULTS FOR STUDENT BEHAVIOR CHANGE (EXPERIMENTAL GROUP, BETWEEN SCHOOLS).....	95
15	ANALYSIS OF VARIANCE RESULTS FOR STUDENT BEHAVIOR CHANGE (CONTROL GROUP, BETWEEN SCHOOLS).....	94
16	ALPHA COEFFICIENTS AND STANDARD ERRORS OF MEASUREMENT FOR THE FIVE AREAS OF THE TARGET SKILLSDIAGNOSTIC.....	97



Abstract of Dissertation Presented to the  
Graduate Council of the University of Florida  
in Partial Fulfillment of the Requirements for the  
Degree of Doctor of Education

THE EFFECTS OF A PARENT EDUCATION PROGRAM  
ON PARENT ATTITUDES AND MANAGEMENT  
SKILLS AND ON THE SELF-CONCEPT AND  
BEHAVIOR OF THEIR LEARNING DISABLED CHILDREN

By

Stephan Leslie Leggett

May, 1983

CHAIRMAN: Paul E. George  
Major Department: Curriculum and Instruction

This research study was conducted with learning  
disabled children and their parents to answer the  
following questions:

1. Will the children of parents who participated  
in a parent program show differences in self-concept, as  
measured by the Tiers-Barris Children's Self-Concept Scale,  
from children whose parents did not participate in the  
parent program?
2. Will the children of parents who participated  
in a parent program show differences in classroom behavior,  
as measured by teachers, from children whose parents did  
not participate in the parent program?

3. Will parents who participated in a parent program show attitudinal differences, as measured by the Parent Attitude Survey (PAS), from parents who had not yet participated in the parent program?

4. Will parents who participated in a parent program show improved behavior management skills, as measured by a behavior management vignette, when compared to parents who had not yet participated in the parent program?

The sample population consisted of forty-six parents who volunteered for parent education and their thirty-nine learning disabled children. The children were elementary students in the Orange County, Florida, school district. The parents were randomly assigned to experimental and control groups. The parents participated in a parent program designed by the Parent Education Exceptionalities Project developed specifically for use with parents of learning disabled children. The treatment consisted of six parent sessions. Parents were presented with factual information about their child's disability (cognitive), had common parental reactions and parenting styles explained to them (affective), and were taught how to implement a behavior modification management system (behavioral).

Parents were posttested using the FAD and the behavior vignette while children were posttested using the Hierarchy. Continuous observations were made by teachers of student classroom behavior. Analysis of variance and multivariate analysis as well as the chi square test for change were employed to analyze the data.

The results showed that there were significant differences favoring the experimental groups at the .01 level of significance for the following dependent variables: parent attitudes, parent behavior management skills, and student classroom behavior. There was no significant difference found in student self-concept.

CHAPTER I  
INTRODUCTION

Statement of the Problem

A substantial amount of time and funds has been expended to improve the school environment of the exceptional child. New legislation for the handicapped has provided a stimulus for increasing teacher education, reducing class size, hiring of teacher aides, and building appropriate facilities. The need for increasing parent education services has been recognized by many people, both in and out of the field of education. Until recently, however, parent education has not been considered an important component of the curriculum of the public schools. The Education for All Handicapped Children Act of 1975 (PL 94-142) has changed this practice. This law mandated involvement of parents in their exceptional child's education (Williams et al., 1981).

Thus, there is a definite need to find effective working programs for parents of exceptional students. Parents of learning disabled students have been particularly active in seeking services of all types for their children through the National Association for Children with Learning Disabilities.

The current parent education materials appear to be successful in instructing parents on how to modify behavior. The materials, however, often use technical terminology that is confusing to parents. In addition, the materials are not specific to parents of exceptional children. They do not cover the important areas of information on the etiology of a learning disability, parental acceptance, or family dynamics. Some of the systems have been designed to include measurement of their effect on classroom behavior. Another problem of existing materials is that many of them have been judged to be at a secondary reading level.

The problem of this study concerned the lack of evaluative data on a short-term parent education program developed by the Parent Education Exceptionalities Project (PEEP) for use with parents of learning disabled children that is designed to improve the self-concept of learning disabled children through parental training, effect positive change in parental attitudes, improve the behavior management skills of parents, and cause positive behavioral changes observable in learning disabled children. The purpose of the study was to assess the effectiveness of such a program with learning disabled children and their parents.

### Significance of the Problem

There has been an increase, in recent years, in the number of exceptional students enrolled in the Orange County Public School District. The Florida Education Finance Report (1981) showed that in the 1980-81 school year there were 1,288 students enrolled in the county's exceptional education programs for all categories of exceptional students. None of these students was classified as learning disabled. In the 1980-81 school year, 14,383 exceptional education students received services, representing an increase of over 444 percent in just twelve years. Included in this increase were approximately 1,000 students identified as learning disabled.

Statistics for the Conference of Administrators and Coordinators of District and State Programs for Exceptional Students (1981) showed that in the 1979-80 school year, services were provided for 149,168 exceptional students in the state of Florida. Of this number, 16,000 students were classified as learning disabled. These figures confirm the high incidence of learning disabilities in the school-age population. The large numbers of students placed into specific learning disabilities programs are not limited to Orange County or to the state of Florida, however. In looking at the national statistics on the percentage of the school-age population served in learning disabilities classes, the state of Florida is shown to be fairly typical.

of the nation as a whole. During the 1978-80 school year, the Florida schools identified and staffed 3.12 percent of their total school population into programs for the learning disabled. This compared to a national average of 3.03 percent. Florida did not have the highest percentage of students served, however. Twenty-two states served a higher percentage of their student population in learning disabilities classes. Alaska, in fact, served 6.85 percent of its student population in these exceptional classes.

Methods to accurately diagnose exceptional students have become increasingly sophisticated. Responses to state and federal legislative statutes mandating programs and services for all handicapped children have dramatically increased enrollment and staff. The Parent Education Exceptionalities Project (1978) conducted an extensive series of opinion surveys and interviews during the summer and fall of 1978. The intent of these surveys was to determine if inappropriate behaviors were considered to be a significant problem among learning disabled students.

Results of these surveys and interviews indicated an overwhelming agreement that inappropriate behaviors were a significant problem of learning disabled students. Superintendents and exceptional education directors listed the home as the number one cause of these inappropriate behaviors and the school as the second cause. Parents ranked

Some resentment as the number one cause of inappropriate behaviors of these students.

Stellar (1979) said that the passage of the Education for All Handicapped Children Act of 1975 guarantees the right of all handicapped children to an appropriate public education at no cost to parent or guardian. He indicated that inherent in the passage of this law was the necessity of involving parents in the entire educational process.

Palans and Stephenson (1979) discussed the need for making parents an integral part of the child's educational life. They said:

Teachers have long been aware of the awesome role parents play in helping children grow emotionally and cognitively. Unfortunately, only limited recognition has been given to making the parent an ally in the child's total education. A casual examination of the relationship between home and school shows how little parents are included in advising, reinforcing, and broadening the wide array of social and cognitive skills that are important in the classroom. (p. 64)

Cooper and Rosavogel (1976) presented an approach to the home-school relationship based upon considerable research and development. They emphasized the importance of finding effective ways to bond the two most formative learning centers for children, the home and the school. Cooper and Rosavogel have shown that significant positive changes, such as improved self-concept, academic achievement, and social behavior, can be seen in the child in the



school setting when this intensive parent involvement program is implemented. However, many of the elements of the home-school partnership require extensive changes in both administrative and teacher practices.

During a two year period, from 1978-81, the Forest Education Manipulatives Project, using funds provided by an ERSS Title IV-C grant, developed a short-term parent education program for use with parents of learning disabled children. This treatment is designed to increase parents' knowledge about their child's handicap, to involve parents in sharing feelings they have about their child with other parents, and to teach parents a specific behavioral approach they can use to modify or eliminate inappropriate behaviors in their learning disabled child. This cognitive-effective-behavioral treatment does not require a change in the educational practices of the school and is, therefore, potentially more practical than the Jordan and Brovagal approach.

The parent program just described has not been previously evaluated. This study will be an evaluation of the effectiveness of this multifaceted program. The effectiveness of this treatment will be assessed by comparing randomly selected experimental and control groups of students and parents.

### Definition of Terms

1. Learning disabled student -- a student who exhibits a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written language. These may be manifested in disorders of listening, thinking, reading, talking, writing, spelling, or arithmetic. They do not include learning problems which are due primarily to visual, hearing, or motor handicaps, to mental retardation, to emotional disturbances, or to environmental deprivation.

2. Inappropriate behavior -- behavior which is observable and occurs frequently, whose severity has a negative effect on the child's learning environment and social adjustment. Some examples are cursing, incomplete school work, talking disrespectfully to the teacher and fighting.

3. Appropriate behavior -- behavior which is observable and occurs frequently and leads to positive consequences for the child. Appropriate behavior has a positive effect on the child's learning environment or social adjustment.

4. Cognitive component -- refers to a process in which parents learn the facts about their child's handicap. This includes the commonly accepted definitions of

a specific learning disability, the expected academic, social, and emotional development of their child, and the most effective academic and social interventions used to help the child compensate for his disability.

4. Affective component -- refers to a process where the changes in family dynamics involved in having an exceptional child are discussed with the parents. Teaching acceptance of the child's handicap is an integral part of this affective component.

5. Behavioral component -- refers to a process where parents learn techniques for modifying existing behaviors and teaching new behaviors. Parents are shown the differences between the traditional and behavioral approaches to treating a child with a learning disability and are taught to collect baseline data on observable behaviors and to chart those behaviors. The behavioral component teaches that behavior is learned, behavior is observable and measurable, and that the consequences following the behavior lead to a strengthening or weakening of the behavior.

6. Cognitive-affective-behavioral treatment -- a treatment where parents learn the facts about their child's handicap, learn and discuss common parental reactions and parenting styles, and are taught basic behavioral principles to be used in developing a behavior management program for their child.

8. Parent attitude -- refers to the feelings and emotions a parent has about his child. This is interpreted as a score on the Parent Attitude Survey (Sherrod, 1980) on five dimensions relative to the role of the parent: Confidence, Coercion, Acceptance, Understanding, and Trust.

9. Self-concept -- this refers to the mental image a person has about himself. It is a subjective experience expressed to others by verbal reports and other overt expressive behavior. This is interpreted as a score on the Farr-Morris Children's Self-Concept Scale (Farr and Morris, 1969).

#### Limitations of the Study

Parents in both experimental and control groups will be limited to those persons who have children identified and placed into the Orange County, Florida, Specific Learning Disabilities Program. Parent participants in these parent education sessions are volunteers. While the pool of volunteers will be randomly assigned to treatment and control groups, this group of volunteers may differ from a group of non-volunteer parents.

Measurement of inappropriate behavior depends upon the accuracy of observation. Teachers will receive an interview orientation to observing and charting behavior as an effort to address this possible limitation.

Measurement of change in parent attitude will take place immediately after completion of the treatment period. A different interval between the end of the treatment period and the time of assessment might yield different results.

Measurement of change in student self-concept will take place four weeks after completion of the treatment period. A different interval between the end of the treatment period and the time of assessment might yield different results.

The limitations inherent in self-report instruments must also be acknowledged (Kerstaud, 1976). Two of the tests used in this study, the Tripp-Barrow Children's Self-Concept Scale and the Farras Attitude Survey, are self-report instruments.

#### Assumptions

1. All behavior, which can be judged appropriate or inappropriate, is learned. Therefore, inappropriate behaviors can be modified.
2. A student who is placed into a specific Learning Disabilities Program in the Orange County Public School system has been appropriately evaluated, diagnosed, and placed.
3. The subjects responded honestly to the self-report instruments used to measure parent attitudes and student self-concept.

### Hypotheses

1. There will be no significant difference between the self-concept of experimental and control group students, as measured by the mean posttest scores of the Marsh-Rossin Children's Self-Concept Scale, as a result of a cognitive-affective-behavioral parent education program (significance level of .01).

2. There will be no significant difference in the parent attitudes of the experimental and control group parents, as measured by the mean scores of the five subscales on the Parent Attitude Scale, as a result of a cognitive-affective-behavioral parent education program (significance level of .01).

3. There will be no significant difference between experimental and control group students in the reduction of inappropriate behaviors, as measured by direct observation, as a result of a cognitive-affective-behavioral parent education program (significance level of .01).

4. There will be no significant difference in the behavior management skills of experimental and control group parents, as measured by a behavior management checklist, as a result of a cognitive-affective-behavioral parent education program (significance level of .01).

The results obtained from an analysis of the above four hypotheses will determine the effectiveness of this

multifaceted model for parent education. Since the need for developing effective parenting programs for parents of learning disabled students has been established, results of this study may prove beneficial to school systems in carrying out the mandate for increased parent involvement.

## CHAPTER II

### REVIEW OF THE LITERATURE

The literature pertinent to this research will be reviewed in sections: discussion of parent education in general; studies of effective parent programs; studies related to the cognitive aspects of parent education; studies related to the affective aspects of parent education; studies related to the behavioral aspects of parent education; and, design and curriculum considerations involved in developing an effective parenting program. Each section will be summarized.

#### Parent Education

Training programs for parents can be placed into one of several categories (Wilson, 1978). There are programs for parents that emphasize behavioral or reinforcement theories. These programs present step-by-step instructions at approximately an eighth grade instructional level on techniques for using a behavior modification management system. According to Wilson, most of these programs do little in the way of providing a developmental understanding of the child and the motivation for his behavior. A program developed by Becker (1971) is an example of this type of program. A second parenting program involves the use of



the discussion group such as the one conducted by Gordon (1963). This approach focuses on influencing parent attitudes. A third approach, and probably the most popular, is Parent Effectiveness Training (Gordon, 1971). This program is based on client-centered therapy or non-directive counseling procedures and emphasizes listening skills and the avoidance of power struggles. A drawback is the expense involved, since only certified trainers can teach it. Minkmeyer's C Group (1970) is a fourth approach to parent education. This method uses traditional therapeutic components such as collaboration, generalization, clarification, concern, confidentiality, and commitment. A particular parenting incident is the focal point of each meeting. A fifth category is the Adlerian approach represented by Perry (1971). The focus here is on the child's environment, expanding the parents' understanding of the child's behavior. This is seen as more important than uncovering any specific stimulus and response. Whitbeck's (1963) transactional analysis model is another method used to educate parents. Illustrating desirable parental responses to the child's behavior is the central theme. Jones' (1974) T.A. for Mom and Dad is another example of this method.

Minkmeyer and Hutzog (1976) developed yet another approach to parent education. Their Systematic Training for Effective Parenting is a systematic, nine-step program presented by a teacher or paraprofessional. The emphasis

is on understanding, communication, and family decision-making.

In general, Wilson (1978) categorized the above programs as either therapy and discussion groups, behavior training groups, or teaching and/or other supportive training groups. Wilson said, ". . . the use of use of these approaches, to the exclusion of others, does not take advantage of parents' diagnostic potential" (p. 58).

One of the most extensive programs on parent education was developed by Kroth (1978) in conjunction with the Parent Involvement Center at the University of New Mexico. The content of this program concentrates on strategies for communication with parents in an education setting. Emphasized are practical techniques for working with and involving parents and the listening and problem solving skills necessary to do the job. Also included are sessions reviewing the dynamics of family adjustment and an optional overview of behavior management principles. The sessions feature activity-based experiences and practice in applying effective interpersonal skills through values clarification exercises, small group activities, role play and field implementation.

Gordon and Neufogel (1978) discussed in detail the development of an effective home-school partnership. The importance of involving parents in decision making is

stressed as being a vital aspect of developing a successful home-school relationship. The family environment is seen as being as important to the learning process as is the classroom. It is emphasized that the best way to counteract a poor home environment is to draw parents into active participation in the operation of the school, with a voice in decision-making. The primary evaluation focus of the home-school program advocated by Gordon and Braverman is on the children. Areas in which changes are measured in children include, among others, self-concept and social behavior. The second key group in a home-school program is the parents. The evaluation should focus on changes in attitudes and behavior of the parents. Included in this were the parents' self-concept, feelings of control over their environment, teaching behavior, and attitudes toward their children.

Gordon and Braverman stressed that one basic premise of most home-school programs is that the home is an important learning environment. The important aspects of the home environment to consider are the extent to which parents create learning situations in the home, the parents' expectations for the intellectual achievement of their child, and the amount of information the mother has on the child's intellectual development.

### Research on General Aspects of Parent Education

Research studies dealing exclusively with a behavioral, cognitive, or affective orientation will be discussed elsewhere in this review. There are, however, several research studies that have been done of the effectiveness of more generic parent education approaches. Lowing (1971) conducted a study to determine if parents' attitudes regarding their children could be changed as a result of an eclectic parent education program that was conducted over a series of six evening classes. The primary content of the program was a combination of Allurian, Rogersian, and behavioral approaches. Based upon the Parent Research Inventory, attitudes that were significantly changed included controlling techniques, parent awareness of emotional needs, parent expression of trust and respect for their children, and parent confidence in their child-rearing practices.

Lathan (1971) developed a systematic media approach to teaching parents to train their preschool mentally retarded children in selected self-help skills. Forty sets of parents were randomly assigned to the experimental and control groups. The results indicated a significant difference in the number of self-help skills learned by students whose parents attend parent education.

There have been recent studies that linked "locus of control" to reading achievement; apparently good readers

demonstrate a profile of being more internally controlled. Roney (1973), therefore, conducted a study to determine if parent education, utilizing an Adlerian approach (which advocates a democratic child-rearing procedure), would have an effect upon parents' attitudes and upon children's reading achievement, on issues of control, and on home and school behavior. The parents in the experimental group attended study groups weekly, for twelve weeks, each a two-hour session. The results indicated that there was no significant difference between the experimental and control groups on any factor.

Dudley (1980) investigated the effects of an assertiveness training program for parents to modify inappropriate behaviors in children and to positively change the parent-child relationship. It was hypothesized that the assertiveness group would show an increase in assertive attitudes and behavior and a decrease in aggressive attitudes and behavior when compared to the control group. Results of this study were somewhat mixed although Dudley concluded that assertiveness training was a potentially beneficial parenting model.

The purpose of a study by Nelson (1981) was to investigate the effectiveness of Adlerian parent and teacher study groups as an indirect method to change child maladaptive behaviors in a positive direction. The population

consisted of preschool through sixth grade students showing maladaptive behaviors as rated by teachers and parents. Parents and teachers attended behavior study groups to learn new principles and methods for interacting with children. Student behavior was rated by both parent and teacher both before and after the parents and teachers participated in a twelve week treatment group. The findings of this study supported the effectiveness of behavior study groups in changing maladaptive behavior in a positive direction.

A study by Lewis (1976) was designed to assess the impact of Parent Effectiveness Training (PET) on a rural-suburban population. Parents were chosen randomly from the parent rosters of two schools and were randomly assigned to one of three groups, two being experimental and one control. The instruments used to assess the training were the Parent Attitude Survey Scale (PASS), the Depressive Scale (D-Scale), the Parents Elementary School Behavior Rating Scale, and the Children's Report of Parent Behavior Inventory. The data from the PASS and D-Scale were gathered pre-treatment, post-treatment, and at two month delayed post-treatment intervals. The data based on teacher assessments using the Inventory were gathered at the beginning and end of the study. Data on the children of the PET families were collected at both the beginning and end of the study. Posttest results showed that PET did not appear to have a

measurable effect on parent attitudes, couples expressed more feelings of confidence in parenting than did parents who participated as singles; teachers perceived children of parents who had taken the FET course to be less blaming and dependent; and, children of parents who were in the treatment group had feelings of being accepted to a greater degree than did children whose parents did not receive training.

Garagh and Gordon (1994) studied the long-term effects of early school intervention by means of parent-education projects to determine if there were lasting effects on school performance and home-school relations. School records of ninety-one elementary school students through grade four who had been involved for one, two, or three consecutive years in the original intervention were examined. The results indicated that there were clear lasting school achievement and performance effects for children who were in the program for two or three years and the effect lasted up to six years.

Epstein (1976) discussed the effectiveness of a treatment program utilizing parents and tape recordings to teach relaxation skills to decrease hyperactive children. The treatment program consisted of six commercially prepared tapes for parents and six for children and required twenty minutes daily over a three-month period. The adult program

included tapes on behavior modification, instructions on ways to use the program, and adult relaxation exercises. The tapes for childrens assessed ways to cope with criticism and methods to use to relax during test situations. Results showed that the children improved their classroom behavior which included more completion of tasks and less fidgeting or nervous behavior. Behavioral ratings kept by the parents showed that the children appeared happier and there was an improvement in interpersonal relations between parent and child.

Herrick (1979) conducted a study assessing the training of parents of learning disabled students in communication skills. The design for the study involved three groups, a treatment group, a volunteer control group, and a non-volunteer control group. Results indicated that the treatment group made significantly greater gains on Carroll's Communication and Communication Index than did the average of the two control groups. Treatment and control scores on the Wich Agency Achievement Test were not significantly different.

Keller (1979) studied the relative effectiveness (among three groups of parents) of the Systematic Training for Effective Parenting Program (STEP). Thirty-three parents of mentally retarded, learning disabled, and speech



impaired children participated in the study. Results indicated that greater attitudinal changes were noted for the hearing disabled and speech impaired groups than the normally hearing group. The speech impaired group was the only one that did not significantly increase appropriate behaviors.

Vukoback (1974) investigated the effects of parent training in enhancing language skills of the parents' preschool children. Thirty-four head start children were assigned to three groups: head start only, training by their mother, and training by college students. The mothers were trained in language skills prior to treatment. Results showed that the children trained by their mothers made more gains on all measures than did children in the other two treatment groups.

McDonald et al. (1974) investigated the effects of educating parents to work with their language disabled children. He concluded that parents were able to become effective teachers of their children.

Robinson and Abbott (1974) investigated the effects of mothers working with their academically at-risk preschool children for twenty minutes per day as a supplement to half-day kindergarten. The experimental group did significantly better on developmental tasks than did the control group. Robinson and Abbott reported that parents held favorable

attitudes about the project and positive changes were reported in parent attitudes. The general conclusion was that parents should be used to instruct their high-risk children.

A study on the training of parents to remediate their children's communication problems with minimal professional contact was conducted by Carpenter and Aspinwall (1971). Parents were given a total of eleven and one-half hours of parent education. The program consisted of orientation to speech and language disorders, behavior observation and recording, and deconstructions and practice in implementing training. Seventy-five percent of the parents were able to successfully implement their respective programs. Fifty percent of the parents were satisfied with the progress made by their children.

What emerges from this look at generic parent education is the great variability in the approaches and methods that can be used to help parents become effectively involved as educators of their children. Several significant points stand out, however. First, parents can become effective change agents in the education of their child if they are properly trained. Second, focusing on one method in working with parents may limit the success of the parenting program. Third, a comprehensive evaluation of any parent

program is essential, with emphasis on changes in parent attitude, student self-concept, student behavior, parental management skills, and awareness on the parent's part about the child's problem.

### Cognition

Many of the parenting programs just reviewed place most of their emphasis on techniques for effecting change with little or no time spent in educating the parents about the nature of their child's problem. In looking at the area of cognition, several authors discussed the effects of providing parents with factual information about their child's handicap prior to or in conjunction with teaching them specific management skills.

Roger Kroth, Director of the Institute for Parent Involvement at the University of New Mexico, has written extensively on the topic of parent education and has trained parent trainers nationwide. His Strategies for Effective Parent-Teacher Interaction is one of the most comprehensive parent training programs available. Kroth (1986) indicated that all parents need some basic information about their child's problem. He maintained that most parents would like information about their child's environment and progress, and the parents need knowledge to exercise their rights and responsibilities. He argued

that school systems have an obligation to provide parents with this information. All too often, wrote Froth, activities at this level are handled casually.

Barnet (1980) found, in an extensive series of interviews with parents of handicapped children, that the more parents know about the particular handicap of their child and the longer they lived with it, the less severe that handicap appeared in relation to other handicaps. Accurate knowledge about the handicap proved beneficial in lessening parent anxiety about their child.

Fox (1975) found that parents did not believe that professionals wanted to become involved with them and the problems of their handicapped child. Parents who were interviewed did not feel that they were given sufficient knowledge and assistance concerning their child's handicap or enough practical help or how best to help their child with his handicap. Fox said that these problems were caused by insufficient training of professionals.

Nister (1967) researched the degree of assistance professionals could give to parents. Nister found that an information exchange between parents and professionals was an effective way to help parents adjust to their handicapped child.

Webster (1976) reviewed a series of studies with parents of children who had communication disorders. One

study looked at the type of questions parents ask parent education group leaders. Webster found that parents initially made requests for the facts about their child's handling more than asking for ways to help the child. The requests for facts decreased substantially during subsequent group meetings. The conclusion reached, after reviewing many of these studies, was in group parent education meetings it might be more advantageous to provide factual information in meetings before moving on to more management related topics.

Salomon (1980) approached parent education within the theoretical context of cognitive problem-solving. A major focus was developing diagnostic procedures for identifying parents who might benefit from an educational intervention based on problem-solving skills related to parenting. Salomon indicated that the theory of human behavior underlying this approach was cognitive problem-solving. "Cognitive theory assumes that behavior is a function of a complex problem-solving process in which the individual selects goals and their means of attainment" (p. 881). The theory suggests that cognitive skills play a critical role in determining parental behavior. Salomon reached two conclusions. The first is that the adequacy of parental problem-solving skills is related to child rearing capacity. The second is that these parents

who might benefit most from educational interventions aimed at problem-solving can be identified with a high degree of accuracy by evaluating the cognitive skills possessed by these parents. Solomon suggested that parent education might be most profitable if it focused on problem identification, generation of alternative solutions, goal generation, and perspective taking.

Hoffers et al. (1979) designed a workshop to give parents of learning disabled children a better understanding of their children's experiences and perceptions. It was found that it was important for parents to realize that learning disabled children face a variety of problems, such as frustration and anxiety, both in and out of school. It is necessary for parents to be sensitive to these problems. By simulating learning disabilities for parents, the authors tried to create a feeling of empathy and awareness on the part of the parents.

Tomas et al. (1979) discussed the use of a competence model for understanding the etiology and treatment of learning disabilities after they had worked collaboratively in evaluating and treating over two hundred children with learning and behavioral problems at the Parent-Child Learning Clinic at the University of Washington Department of Psychiatry. They indicated that parents, not physicians, therapists, or teachers, are in the best possible

position to coordinate and to assume the long-term responsibility for a program aimed at maximizing the child's developmental potential. The professional's primary role is to teach and consult with parents. These authors advocated the development of an individualized home intervention program with detailed instructions given to the parents. Increased knowledge about the child's disability often results in the changed perceptions of the parents. The child is then seen as someone who cannot do what is asked of him rather than someone who will not do what is asked of him. This often has a profound impact upon the way in which parents subsequently relate to their child.

Three studies showed very similar results after studying the cognitive aspect of parent education and parent attitudes. Clemson, Roberts, and Lantz (1974) investigated the use of mothers trained to implement a behaviorally-oriented child group therapy program and compared it to a child-conducted group therapy program. There were twenty-eight children, six to ten years old, who served as subjects for the study. A major conclusion was that the mothers made gains in cognition on the facts about social learning theory. This was not necessarily related to the progress made by their child, however.

"An Assessment of the Effect of a Short-Term Parent Education Program upon Parental Knowledge and Attitudes Toward Child Development, Learning, and Behavior" was the

title of a study conducted by White (1970). The subjects were forty-four parents who lived in Dallas, Texas. The subjects were randomly divided into experimental and control groups. The experimental groups then received eight lessons, one lesson per week, on the following topics: an overview of child development principles; heredity and environment; physical and motor development; cognitive development; self-concept; emotional development; social development; and, personality development. The results of the study indicated that there was a significant difference in knowledge gained with the experimental group showing a higher gain. There was, however, no significant difference between the two groups in attitudes toward parent-child interaction.

The results of a study on the effects of a training workshop for eighteen parents of learning disabled children conducted by Stoenaga (1978) showed that parents were able to make significant gains in their cognitive knowledge about their child's disability. However, no significant change in parent attitude was shown.

A study by Swalin (1979) looked at group counseling procedures designed specifically for use with parents of handicapped students. The purpose of the study was to design an affective-cognitive group counseling procedure, assess this procedure's effect on these parents, and look



at the changes in intrapersonal and interpersonal attitudes of parents brought on by increasing the parents' knowledge of positive behavior management. Thirty-three parents whose children attended special education classes participated in one of three experimental groups or the one control group. One experimental group used a cognitive counseling approach, one experimental group used an affective counseling approach, and the final experimental group used a combination of cognitive and affective counseling. The treatment groups met for two hours for eight weeks.

A statistical analysis of the data indicated that parents who participated in the affective-cognitive group counseling procedure did not achieve significantly higher posttest mean scores on the Acceptance of Self and Others test or in any of the five subscales of the Parent Attitude Survey. However, parents participating in the cognitive group did achieve significantly higher adjusted posttest mean scores on the Positive Behavior Management Attitudes than did parents in the control or other treatment groups. Some conclusions related to cognition. First, attitudinal changes may not be equated with cognitive changes. An increase in knowledge does not insure a change in attitude. Second, an increase in the parents' knowledge of a methodology of child guidance cannot be relied upon to serve as an indicator that "a concomitant change in

competency to utilize the method to implement a program of behavior change with the child in the home has taken place" (p. 188).

The consensus of the sources that were reviewed stressed the importance of providing parents with factual information concerning their child's problem. There is also evidence to suggest that providing parents with this cognitive component of parent education, in isolation from an affective component or some form of skills training, is not sufficient. A more comprehensive program is needed if parent attitudes and student behavior are to be impacted.

#### Affective

There are important factors to consider in looking at the affective area of parent education. These involve the affects that a handicapped child has on the dynamics of family interaction, the emotional reactions of parents, parent attitudes, and parent and student self-concept. These four considerations are discussed in the studies reviewed in this section.

Kroth (1968) has indicated that parental reactions to a handicapped child have often been compared to the stages of reaction to death and dying as illustrated by Kubler-Ross. Several authors have studied parental reactions to the handicapped and lend support to Kroth's viewpoint. Baum (1962), a clinical psychologist who based his work on

observational techniques and personal interviews, suggested that the family adjusts to the handicapped child through stages: parental grief, denial of abnormality, parental hostility, feelings of guilt, shame, and withdrawal. A further finding was that the father tends to ignore the present problem and focus on the long-term economic and social dependency of the handicapped child. Dawson (1977) listed the stages of dying discussed by Kubler-Ross as denial, bargaining, anger, depression, and acceptance.

Some of the earliest research was done by Ferber (1960), who viewed the family as a system of interacting roles with the life cycle of a family proceeding from one stage to another over time. A handicapped child in the family disrupts the normal life cycle of a family and normal family interaction is disrupted. Ferber's research was based on a series of scales and questionnaires.

Greenman (1971) addressed the problems an exceptional child's presence creates on the siblings in the family. Greenman collected data on eighty-three college students who had a handicapped sibling. Each student was interviewed individually, and tests were given. Results indicated that normal siblings tend to adopt the same attitude toward the exceptional child as do the parents. In addition, a family of lower socio-cultural status had a more difficult time coping with the handicapped child. However, there was some

evidence that some normal siblings benefited from the presence of the exceptional child.

A study was conducted by Overman (1974) to determine the effects a parent education program had upon parental acceptance, parental self-esteem, and perceptions of children's self-concepts. There were ninety parents who were randomly assigned to the experimental and control groups. The Self-Esteem Inventory, Parental Acceptance Scale, Primary Self-Concept Inventory, and the Integrated Self-Concept Scale were administered as part of the experimental intervention. Although the results indicated that the experimental parent group did not obtain significantly higher mean scores on self-esteem or parental acceptance, there were higher mean scores for the experimental parent group on the appreciation of the child's unique make-up and total parental acceptance. The data also indicated that experimental parents had become more objective and realistic in their acceptance of themselves and their children, and the parents and their children were making positive behavioral and attitudinal changes.

Although the parents of handicapped children appear to experience a great deal of psychological stress, many parents appear to make satisfactory adjustments. Brossman (1971) interviewed 183 women to determine various ways families adapted to having a moderately handicapped child

in the home. The results suggested that the mother of a handicapped child must receive some recognition from others that her family is regarded as a conventional family. The family must also appear to lead a normal life, although a discrepancy may exist between what people perceive and what actually exists.

Hollister, Koller, and Lei (1973) were interested in patterns of social interaction among families of behaviorally retarded children. A comparison of intrafamily and extrafamily patterns was made between parents who had a behaviorally retarded child in the home and parents who had a normal child in the home. The results indicated that families with a behaviorally retarded child had less intrafamily interaction than families without such a child. The data also suggested that there are differential effects upon extrafamily patterns, which vary by the degree of activity and consequent visibility of the subnormal child.

Parental acceptance of children has been a topic of interest for many parent educators. Cook (1963) showed that parental rejection of the child was more closely associated with a mild handicapping condition while parents whose child had a more serious handicap tended to be more overprotective. Cohen (1978) was interested in whether a parent education program, that was developed under the premise that parental acceptance affects the mental health

of the child through the mediating mechanism of the self-concept, could significantly change parents' feelings of acceptance toward their child. The experimental and control groups consisted of forty-seven mothers. The results of the study indicated that there was no significant difference in "acceptance" as measured by the Father-Parental Acceptance Scale between the two groups.

"A Comparison of Two Parent Education Programs: Parent Effectiveness Training and Behavior Modification and Their Effects on the Child's Self-Concept" was the title of a study conducted by Skidfield (1978). The population for the study consisted of parents of third, fourth, fifth, and sixth grade students who volunteered to participate. Random assignment of parents was made to the two experimental groups. The Coopersmith Self-Esteem Inventory was used in the collection of pretest and posttest data. Although both experimental groups showed positive gains in self-esteem, there was no significant difference between the two groups at the .05 level. There was, however, a significant difference between the self-esteem of students whose parents attended Parent Effectiveness Training (PET) and the control group. An analysis of changes in parent attitudes toward child-rearing showed a significant positive change among PET parents over the control group.

Parent training was not successful in enhancing self-concepts of junior high school students who were enrolled in a remedial reading program in a study conducted by Chasen (1976). The parent training consisted of one group receiving parent education in behavior modification and one group receiving training in transactional analysis. Chasen said, however, that there were many confounding variables that affected the validity of the study. Although self-concept was not increased based on the evaluative instrument, students whose parents attended parent education scored significantly higher in reading achievement than students whose parents did not attend parent education.

A comprehensive study by Cannetti (1978) assessed the effectiveness of the Parent Effectiveness Training Program (PET) in bringing about positive change in parental attitudes and child self-concept in the case of children with learning disabilities. Parents in both control and experimental groups were pretested and posttested using Hartford's Parent Attitude Survey. Children were pretested and posttested using two measures: the Parental Children's Self-Concept Scale (P-SC) and the Children's Report of Parental Behavior Inventory (CRPI). Additionally, the Omorgog was administered to the children's teachers. An analysis of covariance was used to evaluate the data and the pretest was used as the covariate. Children in the

experimental group showed a positive change in self-concept at the .01 level for all scales. An analysis of parent attitude changes in the experimental group showed significant changes in all scales of the PAB. No significant changes in the control group were noted.

Sumariin-Balanger (1979) conducted a research study to determine if parents who participated in the Systematic Training Program for Effective Parenting (STEP) discussion group showed attitudinal differences from control group parents who had not yet participated in the program. Sumariin-Balanger was also interested in determining if participation in STEP produced a positive change in the self-concept of the participants' children. The sample population consisted of fifty parents who had volunteered to participate in a STEP discussion group along with their forty-five children. Parents were randomly assigned to experimental and control groups. Using a multivariate analysis, significant differences were found in both parental attitudes and self-concept as a result of parents participating in the treatment program.

Worqua and Young (1979) were interested in assessing maternal attitudes. It was hypothesized that maternal attitudes may be a variable affecting posttreatment termination of medical treatment of enuresis. The subjects of the study were 134 mothers of enuretic children. Results showed that



mothers with low socioeconomic status were less tolerant of their child's problem and withdrew more often from a treatment program for their child than did more tolerant mothers.

Kogan and Tyler (1978) said that there is widespread recognition that parenting a handicapped child is a situation which creates risks for a variety of distortions of normal parent-child interaction. Their study tested the effectiveness of two approaches to parenting for parents of preschool developmentally-delayed children aged three through five. There were sixty parent-child pairs who were randomly assigned to one of three groups: individual parenting instruction only, individual plus group instruction, and comparison group with no instruction. Parent instruction programs were individually designed to teach parents to change their interactions with their child, decrease conflict areas, and increase the self-esteem of both parent and child. Final assessments one year after completion of the treatment indicated that the treatment groups were clearly different from the comparison group. Parent instruction produced large positive gains in social interaction skills in the treatment group. Results suggested that negative attitudes between mothers of developmentally-delayed children and their child can be positively changed.

An interesting study measuring the effect of parent education on parents' attitudes and the behavior of their severely retarded children was conducted by Ingersoll (1974). A total of twelve parent couples were randomly assigned to the experimental and control groups. The experimental group received parent education for six weeks. The results indicated that parents who received parent training scored significantly better in attitudes toward discipline, protection, indulgence, and rejection than parents who did not attend parent training. There was, however, no significant difference in the frequency of disruptive behavior of the children whose parents were in the experimental and control groups. The author indicated that there are three steps to behavior change: parental attitude, followed by parental behavior, followed by the child's response pattern.

Diagnostis (1978) did an extensive review of the literature on changing parent attitudes. He stated:

Clearly, working to effect change in parental attitudes can be a viable means of effecting change in their child's self-concept, overall judgment, and academic achievement. It has further been seen that this intervention is of particular importance in the case of children with handicapping conditions, and, more specifically, with learning disabilities. (p.10)

Holman (1968) evaluated the effectiveness of parent and student group counseling in improving the personality adjustment and academic status of underachievers. There were thirty-two male Caucasians in the tenth grade who were

matched in pairs on IQ, age, achievement, reading level, and socioeconomic status. Four groups were formed: those that received no counseling; parents-only counseling group; students-only counseling group; and, parents and students in separate counseling sessions. The emphasis was on growth and adjustment within the affective domain. Results showed that group counseling focusing on affective change can improve academic and personal functioning of underachievers. Results also indicated that parents need to be involved if grades are to be raised.

Hoppers and Ogden (1943) did a study on the effects an affective group counseling approach had on the academic achievement of underachieving students. A total of twenty-eight tenth grade high school boys with above average intelligence scores and low grade point averages were selected. Four groups were seen weekly for twelve weeks for one hour counseling sessions. The results indicated that the boys made positive, significant changes in academic achievement when parents were counseled. It was recommended that group counseling be used with parents and students earlier in the students' school life.

The literature on the affective aspect of parent education showed that parent training can significantly influence parental attitudes and self-concept, although there were some studies that presented conflicting evidence. An

awareness of the changes a handicapped child can cause in family dynamics also appears to be of extreme importance in developing an effective parenting program.

### Behavioral

Many of the previous studies have shown that skills training can be enhanced through an awareness of affective factors and through an adequate presentation of cognitive information about the child's handicap. The studies in this section focus on the use of behavioral principles to improve parent management skills.

Stancetti (1978) summarized the writings of several authors (Gelfand and Hartman, 1968; Hartman, 1978; Trancott, 1971; and Werry and Wollersheim, 1969) and listed the major advantages of using behavior modification in parent training: behavior modification is based on empirically derived theory; parents prefer a treatment model that does not focus on risk behavior assumed by the medical model; persons who are not skilled in behavior change techniques can rapidly learn and carry out a treatment program; only a short training period is required; problems can usually be well-defined and are amenable to behavioral treatment; and, it is easy to use in the home setting.

Sell (1971) discussed in detail the basic procedures that define a behavioral approach to modifying behavior. Very briefly, these procedures are summarized as follows:

the behavior must be clearly defined; once the behavior is clearly defined, the apparent or baseline level of the behavior is recorded and the level of occurrence of the behavior is measured before any attempts are made to change the behavior; the experimental procedures are then initiated and attempts are made to modify the behavior by rearranging the consequences which follow the behavior; and, the recording of the behavior is continued providing continuous feedback as to the effectiveness of the modification.

Hall cited several experiments and case studies involving parents that indicated the successful use of a behavior modification approach. One case study involved a parent that wanted to reduce nail biting in her nine-year old daughter which occurred when the child had to read. Using self-recording, extra reading time and praise as reinforcements, nail-bites were reduced by over eighty percent in one month.

Another study cited by Hall involved a parent who was having difficulty in getting her two daughters to do daily work and personal chores at home. The parent initiated a behavior modification plan involving charting and a token system (marks on a chart) backed up by money. Completion of tasks increased significantly. This study demonstrated that the behavior modification program was effective in getting the two girls to complete home tasks.

A final study presented by Hall involved an eight year old girl from an upper middle-class socioeconomic home who was afraid to sleep alone at night. The parents devised a chart. On it they marked whether or not she left her bed and came to her parents' bed. This was used for baseline. The parents used self-cheating and money as reinforcers to modify the child's behavior. After six days, the parents removed the monetary incentive. The child's inappropriate behavior proved to have been successfully modified.

Wolf, Bailey, and Shea (1964) reported a successful study that involved the application of operant conditioning procedures to the behavior problems of an autistic child. Extinction procedures eventually reduced tantrum behavior and bedtime problems. Shaping procedures were also found to be helpful in increasing verbal responses and the wearing of glasses.

Parents were successful in shaping their children to learn new words in a study conducted by Rybock (1965). Four children who were identified as having reading problems were reinforced by their parents with tokens that could later be used to purchase commercial items. The number of words that was learned with thirty to forty-five hours of training ranged from 421 to 818. Rybock concluded that it was not necessary to have a person highly trained in education to administer the training.

Research also indicated that operant conditioning techniques are beneficial in affecting the verbal behavior of young children with severe language disabilities. Tinsley (1976) used operant conditioning techniques to increase the vocal/verbal behavior of preschool language-impaired children. The verbal behavior of all subjects increased during the experimental phase. During the reversal phase, the students' behaviors became disruptive but decreased immediately upon resumption of the reinforcement system.

"Modification of a Child's Problem Behaviors in the Home With the Mother as Therapist" was the title of a study conducted by Seidler, Soper and Glass (1968). The subject was a four-year old boy of average intelligence who had a history of disruptive behavior including screaming, biting, fighting and disobeying. The mother was instructed to perform certain tasks, such as removing the boy from the room and placing him in the bedroom when he engaged in screaming and fighting, and reinforcing him when he behaved appropriately. The results indicated that aggressive and disobedient behaviors were clearly changed by manipulating the consequences of these behaviors. The data suggest that parents can be trained in operant procedures that will significantly modify their child's behavior.

Garrard and Saxon (1971) described a case study with-  
being parent education in behavioral principles to prepare  
a child for hearing therapy. Parental training consisted  
of readings on behavioral techniques, discussions with edu-  
cational professionals, direct training by a psychologist,  
and supervised implementation of the behavioral techniques.  
The behavioral principles used were reinforcement of  
correct responses and ignoring of crying and non-attentive  
behaviors. The results of the study showed that the mother  
was able to use the techniques successfully in her home  
to decrease inappropriate behavior and increase appropriate  
responses.

Loggins (1974) investigated whether a parent trained in  
behavioral analysis could teach her four-year-old child  
to walk. After three treatment sessions lasting approxi-  
mately one hour each, the child could successfully use  
walking as a means of mobility outside of the training  
sessions.

These and other studies done by Bell (1973), Berman  
and Teets (1973), Skinner (1967), Tucker et al. (1967),  
and many others, showed that behavior modification pro-  
grams can be extremely effective when used by parents  
as a tool for modifying inappropriate behaviors. Of  
greater interest here, however, is the use of these tech-  
niques in combination with a group approach to parent



education. The question to be investigated is whether or not these principles can be effectively taught in a group setting so that parents can successfully implement these behavioral principles in the home and in cooperation with the school. Several studies addressed this important question.

Slusberg (1971) selected parents with severely and profoundly retarded handicapped children who were on the waiting list for institutionalization. The parents were taught operant procedures to use in teaching their children basic self-help skills. A three-day workshop included lectures on mental retardation, operant conditioning, and self-help skills. Slusberg concluded that parents could successfully train their children if a parent education program provided them with the appropriate operant conditioning procedures.

Jacobs (1971) conducted a study to investigate the effectiveness of modifying the child management behavior of parents as a result of training in an operant-based program. The parents attended six weekly instructional sessions. The results indicated that parents were able to generalize disocially presented information to the applied setting of the home.

A similar study was conducted by Borrey (1970). The investigation was designed to explore the effects on parents and children of training parents in the use of behavior modification. The subjects consisted of six parents who volunteered to attend the ten weekly sessions on behavior modification. The results indicated that parents who attended the sessions were able to successfully implement a precise behavior management approach to behavior modification and management of their child at home. One problem area in the study was the high number of parents who failed to continue in the program.

Reddington (1979) studied the effects of a parent program where parents reinforced appropriate classroom behavior by reinforcing their emotionally handicapped children when they came home at the end of the school day. Aggression, verbal aggression, and not attending to study were the target behaviors for the eight boys. The results indicated that the average daily record of inappropriate behavior dropped from 39.9 percent during baseline to 14.8 percent when parents reinforced appropriate behavior at school.

Wahler, Winkel, Peteraco, and Morrison (1985) demonstrated that mothers could be used as trainers for children who were referred to a guidance clinic because of

disruptive behavior in the home. The data clearly indicated that it was possible to train mothers in behavior modification and to ultimately change children's behavior. The design of the experiment, however, did not permit assessment of the generality of the changes in the children's behavior.

Having parent trainers go into the homes of parents was the primary focus of a study conducted by Sheeres and Shogry (1972). Parent trainers visited the homes of seventy-five mothers who had children enrolled in a pre-school program for the multihandicapped. The trainers instructed parents in initiating, observing, and charting behavior. The results of the study indicated that handicapped children can progress above their expected developmental rate if the parents are trained in behavior modification.

Feiris (1980) demonstrated that a behavioral approach could be successful in teaching parents to help their children learn prewriting skills. Parents were taught modeling behavior (verbal and physical), positive feedback, corrective feedback, and general verbal reinforcement. Precalibration charting was used to obtain baseline data on the teaching behavior of the parents.

The primary purpose of a study by White (1972) was to develop and evaluate an effective parent training program

using behavior modification techniques. Parents were trained to alter maladaptive behavior in their learning disabled children in a relatively short time. The subjects were twenty sets of parents with children in learning disabilities classes. A multiple baseline design was used as a method of control and subjects were divided into four groups. Each group attended four meetings and parents were trained in selecting a target behavior, recording baseline data, free operant conditioning, response cost, and other behavioral principles. The major conclusion reached was that parents were able to significantly decrease maladaptive behavior in their learning disabled children using behavior modification techniques as measured by a daily recordkeeping system as a target behavior. Parents showed that they could acquire behavior modification techniques and skills.

Two studies provide conflicting data on whether or not parents will continue to apply behavior management skills that they learned in parent education after the instruction is completed. Gillan (1975) analyzed data based on over 170 hours of follow-up observation of mothers who attended behavioral and nonbehavioral treatment groups. The results of the study indicated that these two groups did not react any differently to inappropriate behaviors of the child in the home. Baker (1977), however, conducted a

follow-up study which was carried out fourteen months after the completion of the parent education training. A total of ninety-five families were interviewed in their homes. They were also asked to take the Behavioral Knowledge Test which was used to measure gains in parent knowledge of behavior principles. The Behavioral Assessment Manual was used to measure the child's progress in developing better self-help skills. The results indicated that mothers had essentially maintained their knowledge of behavioral teaching principles during the year following training and the children maintained their gains in self-help skills. Although only sixteen percent of families began new formal programs, seventy-six percent reported some new incidental teaching for one or more skills.

A twelve-week program to help parents cope with their mentally retarded child was described by Mauro (1978). Parents were taught to use developmental checklists to observe their child's behavior and to help set realistic goals. Parents were also taught behavior analysis techniques to apply to home learning situations. The program was shown to change the approach parents have in dealing with their child's problems and to potentially increase their effectiveness in managing their child's behavior.

Embry (1978) undertook a study to determine whether a group of twenty-six parents could generalize the use of

behavior management techniques to the interventions they had daily with their developmentally disabled, behaviorally disordered, or normal preschool child at home. Parents participated in a ten-week course. Results indicated that, in an instructional setting, parents did not substantially change their method of interacting with their child and the child's behavior did not improve. In a free play setting, however, parents did improve their behavior management skills and their child's behavior showed improvement.

Maupon and Poplin (1981) reviewed the use of a behavioral approach by parents in affecting change in their child in his or her environment. They said:

... the data do strongly suggest that when correctly trained in using the technology, parents are able to become more competent in their role and are most able to provide their offspring with the structure and training required to function successfully in society. Reports of parental success in using behavior modification with a variety of children and behaviors have clearly demonstrated the efficacy and flexibility of the behavioral approach. (p. 18)

The vast majority of the studies reviewed reinforce the idea that behavioral technology is an extremely effective tool for eliciting behavior change. The literature also supports the effectiveness of having parents implement behavior modification programs with their children. The difficulty with using it can "be traced to a failure to apply what is systematically known. It is not only that

behavioral principles are not systematically applied; they are, if applied at all, only sporadically applied" (Bome and Teetsl, 1975, p. 121). In studies where parents have been adequately trained to implement a behavioral management system, successful behavior changes usually occur.

#### Design and Curriculum Considerations

Parent education often varies in curriculum and design. In recent years, researchers have begun to study various methods, designs, and overall delivery systems. Neuhouser (1974) conducted a study that formulated a curriculum design for parent education in early childhood based on the philosophical framework of the person-oriented curriculum organization. The assumptions that were derived for the study were:

- (1) The theoretical framework of the "person-oriented" curriculum organization should be the foundation of design.
- (2) The parent should receive first priority in curriculum decision making.
- (3) The young child benefits from involvement of his parents in an education experience which stresses the optimal development of the person.
- (4) An education experience based on the person-oriented curriculum organization should enable parents to provide a similar educational experience for their young child.
- (5) Parent education has an important contribution to make to American society.

Fusch (1978) conducted a study to determine the effectiveness of using educational games to increase knowledge of behavioral principles in parents. Six mothers from low socioeconomic backgrounds attended classes twice a week over a six-week period. The data were studied by measuring the functional relationship between playing the game and positive increases in task success on reinforcement, shaping, retreat, and punishment. The results indicated that the four phases of the game were effective in teaching mothers behavioral principles.

The assessment of the effectiveness of a National Child Management Program was the purpose of a study conducted by Kaitera (1978). Instruction was given to seventeen parents in national child management for a total of five sessions. Parents then received instruction in child management principles for an additional five sessions. The National Child Management Program group held significantly more liberal attitudes towards the degree of freedom, independence, and management for children than did the control group. There was, however, no significant difference in behavior of the children as measured by the Program Children's Behavior Checklist.

Professionals in the mental health profession routinely advise parents of the retarded child to seek therapy



and counseling. Wolfe (1977) suggested, however, that parents generally need honest information about their child, implications for the future, and concrete strategies for coping with the child's special needs. Wolfe, therefore, developed instructional manuals that were written to assist parents of retarded children in teaching self-care skills, promoting language development, and managing behavior problems. The families in the experimental groups used the manuals with different amounts of assistance from professional trainers. The results indicated that the manuals were highly effective in instructing parents in ways of changing their child's behavior.

Boyd (1978) developed a systematic parent training program that was used in the home. The primary goal of the program was to make each parent assume responsibility for instructional planning and implementation of the plan. Home teachers were trained to role parents in an array of behaviors. The home teachers would then build on skills that parents possessed and would train parents by modeling, prompting, recording, and providing reinforcement through corrective feedback. The data indicated that the parents did assume more responsibility for instructional planning and that the parents were successful in changing their children's behavior.

"Alternative Delivery Formats for Parent Education Programs" was the title of a study conducted by Gartin (1977). There were twenty-three mothers who were randomly assigned to four treatment groups: parent participation in the children's program; parent meetings; home visitation; and, written materials only. Each of the parents received identical weekly parent packets which included instructions, a book, and a word list. The success of the program was analyzed by pretests and posttests with the Reading Picture Vocabulary Test and the Comparative Language Test. The results of the study indicated that the four delivery systems were equally effective.

Leig (1977) conducted a study to determine if para-professionals could be used as home trainers to teach parents of trainable retarded children effective ways of changing their child's behavior. There were twenty-three children and their parents in the experimental group. The program lasted six months during which time 150 tasks were taught to the children. The results of the study indicated that the children made statistically significant improvement in the four areas of adaptive behavior as measured by the AMHD Adaptive Behavior Scale. The children also scored significantly higher in mental age as measured by the Bloxton Intelligence Test.

The main purpose of an investigation by Spector (1975) was to determine whether any one of three different types of short-term parent counseling approaches significantly improved the mother-child relationship and the child's behavior. The three approaches were traditional psychoanalysis, parent-child involvement, and behavior modification. The population consisted of learning disabled boys in grades one to nine and their mothers. Results showed that all groups made some behavior improvement during the treatment period and no one treatment group was dramatically more powerful than the others in effecting change although the psychologically-oriented group was least effective. Spector said that in view of apparent improvement in all of the children, the training of mothers as counselors may be more effective than directly treating the child.

Lehan and Heflinger (1971) developed and tested a multimedia training package for parents of mentally retarded children. The parents of forty preschool mentally retarded and multihandicapped children served as subjects. Parents were randomly assigned to control and treatment groups. The experimental group received four slide-sound presentations with instructions in behavior, cues, reinforcement, programming, and recordkeeping. Results significantly favoring the experimental group were found

following posttesting. Thus, the authors found support for the use of multimedia packages for the training of parents of handicapped children.

Goldstein (1988) investigated the effects of participation variables such as age, level of education, stress, and motive orientation as they related to the perceived learning needs of sixty parents of handicapped children. The study used a sample survey method. The results indicated that subjects tended to participate in parent education for self-development or growth related motives. Parents indicated they needed the greatest assistance in administering firm discipline, locating appropriate resources, and identifying developmental milestones.

Edelman, Fiedman, and Purincy (1979) found in a study entitled, "Training Parents of Brain-Injured Children in the Use of Operant Conditioning Procedures," that success and failure related to the parents' level of formal education. All parents, however, indicated that they experienced success in changing the child's behavior. The authors found that many of the parents failed to show good comprehension of what to do, or did not attempt to carry out the program. The authors concluded that the traditional format of parent education

that utilizes reading, lectures, and discussion may not be practical for all parents.

The studies reviewed indicate that designs and curricula which facilitate and encourage parent involvement are the most effective. Effective designs also give the parent an active part to play in changing the behavior of their child. Flexible program formats utilizing a multi-media presentation were also shown to be effective. Many successful parenting models included in their curricula some form of behavior management.

#### SUMMARY

This study was based on the assumption that a cognitive-effective-behavioral parent education program could change parent attitudes and behavior management skills, as well as children's self-concept and behavior. Therefore, the chapter was a review of literature related to factual knowledge of kidnapping conditions, effective variables affecting self-concept and attitudes, and behaviorism and its implementation by parents. In addition, a review of the field of parent education provided insight on existing parent education approaches that have proven to be successful.

Several conclusions may be drawn from this review of literature:

- (1) Parents can become effective change agents for their child.
- (2) A multifaceted approach to parent education seems to offer the most promise of success.
- (3) The importance of having a skilled parent trainer cannot be underestimated.
- (4) Parents want and appear to benefit from an in-depth knowledge about their child's problems. However, the cognitive component alone is insufficient for affecting change.
- (5) Parent training can have significant effects on parental attitudes, child behavior, and child self-concept.
- (6) The presence of a handicapping condition significantly affects parental attitudes toward the child and also affects the parent-child relationship.
- (7) Behavioral technology can rapidly and effectively modify inappropriate behavior in children. Furthermore, parents can be trained to effectively implement a behavior change program.
- (8) Designs for parent programs should encourage parent involvement as a change agent for their child. Consideration should be given to including a behavior management component. A multimedia format is suggested.
- (9) There is a need for further research on the applicability of a comprehensive parenting program combining cognitive, affective, and behavioral elements with parents of learning disabled children.

This chapter was a review of the literature on the cognitive, affective, and behavioral elements of parent education and design considerations related to their use. The following chapter describes the methods to be utilized.

In conducting the study, Chapter four is an analysis of the results of the study. The final chapter summarizes the findings and conclusions of the study and makes recommendations for future research with the cognitive-affective-behavioral parent education approach.

## CHAPTER III

### METHOD

This study was designed to assess the relationship between a cognitive-affective-behavioral parent education program and the major criterion variables of the study which were parent attitude, student self-concept, parent behavioral management skills, and the incidence of student inappropriate behavior. It was the intent of the study to index attitude changes in children and parents while assessing the effects of the intervention program in reducing inappropriate behaviors of students in the school when parents were taught to develop a behavior management plan. The complexity of the problems defined by the study required multiple assessment measures.

This chapter describes the method of the study. The elements include operational definition of variables, description of the research design, procedures involved in implementation of the treatment, sample description, instrument validity and reliability, statistical procedures employed in the analysis of data, and procedures involved in the collection of data. Each of these elements is described in detail in the following pages.



### Variables

There were four major criterion variables in this study. The incidence of inappropriate behavior was measured by charting the frequency of school behaviors as observed by teachers and independent observers. Behavior management skills were determined by analyzing responses made by parents to a locally-developed behavior vignette. Student self-concept was measured by looking at responses made on the Finger-Harris Children's Self-Concept Scale by pupils. Parent attitudes were determined by the responses made to the Parent Attitudes Survey by parents. These were the four major independent variables that were analyzed.

### Design

This study used two experimental designs for research, the posttest-only control group design and the pretest-posttest control group design. Campbell and Stanley (1963) stated that the pretest-posttest control group design is the most rigorous control group design and as early as 1913 was used and accepted without explanation. The authors commented as follows when discussing the posttest-only design:

While the pretest is a concept deeply embedded in the thinking of research workers in education... it is not actually essential to true experimental designs. For psychological reasons it is difficult to give up "knowing for sure" that the experimental and control groups were "equal" before the differential experimental treatment. Nonetheless, the most adequate all-purpose assurance of lack of initial biases between groups is randomization. Within the limits of confidence stated by the tests of significance, randomization can suffice without the pretest. (p. 20)

Parents and pupils were randomly assigned to experimental and control conditions. This was accomplished through the identification of a common pool of volunteers for the program. Any disadvantages accrued by the control group in not receiving the material and processes of the treatment were counter-balanced by their subsequent full participation in the treatment program.

The incidence of inappropriate behavior of students was assessed using a pretest-posttest control group design. This design was selected since the nature of continuous direct behavioral observation is compatible with the use of pretest-posttest gain scores. The availability of pretest (baseline) scores made it possible to examine the interaction of X and pretest ability level.

According to the Campbell and Stanley paradigm, the design may be diagrammed as follows:



O1 and O2 were pretest measures on the Behavior Rating Chart; O3 and O4 were posttest measures on this instrument. Treatment X was parent education with the experimental group using a cognitive-affective-behavioral approach.

The incidence of inappropriate behavior warranted additional consideration. This variable required qualitative judgment and was assessed by observation. The

observations were completed by the classroom teacher with assistance by an independent observer.

Student self-concept, parent attitudes, and parent behavior management skills were assessed using a posttest-only control group design. This design was selected since it controlled for testing as main effect and interaction but did not measure them. Such measurement, however, was tangential to the central question of whether or not X did have an effect. Therefore, this design was selected whenever possible.

According to the Campbell and Stanley paradigm, the design may be diagrammed as follows:

X	X	O2
R	X	O1

R = Random Assignment

O2 and O1 were posttest measures on the Flask-Martin-Childsman's Self-Concept Scale, the Parent Attitude Survey, and the Behavior Management Tactics. Treatment X was parent education with the experimental group using a cognitive-effective-behavioral approach.

A comment can be made about the feasibility of using the comparative-experimental design approach in this study. Kerthen and Sanders (1973) made the following statement on the question of the experimental and control groups:

. . . that equating of groups in hypothesis was recognized early in the history of experimental design. In comparative experimental design, groups are made "randomly equivalent" -- which

is not strictly equivalent at all -- and post experimental differences are suspected to reveal whether they are small enough to be attributed to the original random assignments or whether a treatment effect must be postulated to account for a large difference. Thus, valid experimental comparisons are not impossible just because experimenters cannot perfectly equate groups. (p. 220)

#### Method and Treatment Model

The underlying assumption of this study was that all behavior is learned. Therefore, inappropriate behavior is learned and must be unlearned. A child must learn appropriate behaviors which will then be substituted for inappropriate behaviors occurring under certain circumstances. The treatment used in this study was designed with that in mind.

The overall strategy of the cognitive-behavior-behavioral treatment was to train parents to teach their learning disabled child new behaviors, and thereby, to reduce the frequency of inappropriate behaviors. In addition, the treatment was designed to increase appropriate parent participation in the learning disabled child's life.

Prior to the start of the parent education program, school principals were contacted to insure their cooperation and the cooperation of their staff. A visit was paid to each principal and a brief description of the program was given. All principals that were contacted agreed to participate.

Inservice training was then conducted for social workers, exceptional education teachers, and guidance counselors that served the participating schools. This one-day inservice familiarized these individuals with the content of the parent education program and the process necessary for implementation. Workshop participants were then asked to contact the project staff if they were interested in serving as parent trainers.

Learning disabilities teachers at all schools were asked to contact parents of the children in their classes and offer them parent education (See Appendix II). The names of interested parents were sent to the project staff. Parents were randomly assigned to experimental and control groups. Parents in the experimental group were given the starting date for parent education. Parents assigned to the control group were assigned a later starting time which was after the conclusion of the experimental sessions. Parents were advised that babysitting services would be provided at no cost to them.

Two parent trainers were selected for each of three parent groups. The treatment consisted of six parent sessions approximately one and one-half hours in length. Each session began with a warm-up activity, followed by a short filmstrip presentation, and a parent trainer-led discussion session. The parents were given a test to take home with them which reinforced the information presented

in the filmstrip. A sequential outline of the cognitive-affective-behavioral approach to parent education is presented below:

**Session 1      Learning the Facts**

During this session, parents learn factual information about their child's exceptionality including the history of the treatment of the exceptionality.

**Session 2      Learning to Cope**

In this session, parental reactions to the handicap are presented along with several ineffective parenting styles. The Director parenting style is described. This is the parental style which is considered the most effective. This session often assumes the characteristics of a counseling session.

**Session 3      Learning to Change**

Traditional approaches, including the medical approach, are compared to a behavioral approach. An introduction to the positive reinforcement cycle is presented. These behavioral fundamentals give parents a basis for the behavior management approach described in session four.

**Session 4      Learning to Praise**

The fourth session introduces the P.A.I.E. (Praise, Approval, Ignoring, Disapproval) system, which is the specific behavior management system developed by Dr. Charles Galanter.

**Session 5      Learning to Report**

This session summarizes the previous information presented to parents and introduces the parents to the home-school behavior change project. The child's teacher is encouraged to attend this session.

Session 4 How's It Going?

This session takes place two weeks after the fifth session and is designed to discuss the results of the year-long project and answer questions that parents may have. Parents are encouraged to stay in touch with each other as a means of maintaining a support group to help work through future problems that may arise.

The Sample

The experimental and control samples were selected from the population of the Orange County Public School System. Eight schools were identified for inclusion on the test. These schools were selected because they cover a wide range of geographic, socioeconomic, and achievement levels. In addition, the schools represented an adequate variety of urban and rural schools. A summary of the demographic characteristics of the schools designated for the study, including race, urban-rural classification, and percentage of low income families is presented in Table 1.

A total of thirty-nine pupils and forty-six parents were involved in the study. Parents and students were randomly assigned to experimental and control groups. A common pool of students was screened and identified as eligible for parent education. The parents' cooperation in the study was solicited. It should be carefully noted that participation in the program was strictly voluntary.

TABLE 1

## SCHOOL, DEMOGRAPHIC DISTRIBUTION

SCHOOL	WHITE	BLACK	HISPANIC	ASIAN	AMERICAN INDIAN	TOTAL	Low Income
Belmont	471	282	30	6		689	60.2
Conroy	451	8	18	2		479	15.43
Englewood	338	43	123	28	12	544	36.28
Lulu Otero	288	288	13	2		621	45.76
Planor	718	1	28	12	8	832	25.43
PlanLoch	224	287		2		513	38.78
Prosser/Smith	618	27	14	8		687	7.4
Stemmerich	528	8	28			564	5.6



the biased nature of this sample and population is acknowledged. It is equally clear, however, that this volunteer pool was precisely the population for which the treatment was intended.

#### Instrument Validity and Reliability

The instruments used as criterion measures fall into three general categories: those that were standardized, those that assessed continuous progress, and those that were locally developed. Some of the criterion measures in this study varied considerably from what has been considered traditional assessment procedures.

The decrease in the incidence of inappropriate behavior or the increase of appropriate patterns in the targeted children was a major objective of the treatment. Accurate assessment of the behavior patterns of the children required precise observations of the behaviors in the environments in which they occurred. Historically, these observations have been considered in the realm of self-report. Recently a series of studies has appeared in the literature which strongly suggests that these kinds of data represent the most accurate information when compared to other methods of choice. Specifically, Howard et al. (1985) reported the results of three studies dealing with the assessment issue. The results of these studies were cited as evidence that the teacher and observer self-report methods selected for this study offered the best hope of accurate data.

A multioobserver approach was selected to assess these behavior patterns. Once a behavior pattern was targeted and the intervention strategy implemented, two observers became involved in the assessment of each child. In the school, the teacher was the primary observer with periodic validation. This permitted a blind check on the accuracy of the incidence counts.

In order to assess the consistency with which teachers and independent observers were able to reach agreement on the incidence of inappropriate behavior, a reliability study was completed. Two videotaped vignettes were prepared (A and B) and shown to both groups. Prior to the viewing of the films, the correct number of occurrences was determined by a group of educational professionals. Each individual in the teacher and independent observer groups made four separate observations and recorded his or her data. The sample size in each group was eleven.

The names of the tapes are included in Appendix IV. A strict control over the administration session was maintained so that the subjects were not allowed to discuss the tapes or to interact in any other way. The time period between the two administrations of the film was approximately one hour.

For the two administrations, the frequencies in the cells outlined above were treated as criterion measures for

a paired hypothesis test. Specifically, the comparisons that were made are summarized in Table 2 with the results of analysis procedures.

Inspection of Table 2 will reveal that only one pair was significant at the .05 level and that was between teachers for the first and second administrations of the B tape. The actual mean difference which produced the significant result was a value of .72. All of the other paired differences yielded non-significant differences.

In addition the frequency of each individual's incidence count was compared to the correct answer for both of the vignettes. A summary of those results is presented in Table 3. It may be observed that the vast majority of subjects either achieved the correct answer or was only one occurrence away from it.

The behavior management skills of the parents in the experimental and control groups were assessed through the use of a behavioral vignette (Appendix III). A particular problem situation was presented and the parent was asked to formulate a plan for dealing with the situation. The responses were assessed in terms of the following scoring criteria: rules established, behaviors pinpointed, consequences identified, behaviors recorded, and the consistency and immediacy of reinforcement specified. A panel of judges assessed the content validity of the vignette

TABLE 2  
RESULTS OF THE PAIRED HYPOTHESIS TESTS  
FOR THE CONSISTENCY OF THE OBSERVANCE  
OF INAPPROPRIATE BEHAVIOR

		$\bar{X}$	$s$	$SE$	$t$	$T^*$	$\beta$
Teacher	81	7.82	.40	.18	.18	-.68	.81
	82	8.88	.89	.27			
Teacher	81	4.18	.40	.18	.75	1.75	.834
	82	4.92	.30	.18			
Independent Observer	81	7.18	.58	.28	.18	-.68	.84
	82	5.36	.51	.25			
Independent Observer	81	5.87	1.38	.42	.27	.54	.88
	82	4.81	.42	.18			
teachers and Independent Observers	T81	7.82	.48	.18	.29	1.44	.133
	T82	7.18	.58	.28			
teachers and Independent Observers	T82	8.88	.89	.27	.84	2.04	.87
	T88	7.36	.51	.18			
teachers and Independent Observers	T81	4.48	.40	.18	.44	1.30	.32
	T82	5.87	1.38	.42			
teachers and Independent Observers	T82	4.92	.30	.18	.68	.84	.88
	T88	4.81	.42	.18			

TABLE 3  
 FREQUENCY RESPONSES  
 TO THE VIGNETTES

VIGNETTE A (CORRECT ANSWER = 7)

Obs	TR1	TR2	TR3	TR4	T
3			1		1
4			1		1
7	3	4	4	2	14
8	7	3	3	4	17
10	1	4			5

VIGNETTE B (CORRECT ANSWER = 3)

Obs	TR1	TR2	TR3	TR4	T
3	1				1
4	7	1	3	3	14
7	3	10	7	4	24
8			1		1

to ascertain whether or not it contained the appropriate problem elements related to the treatment. The behavior vignette was administered on a pretest-posttest basis to a pilot sample of parents. A posttest result yielded a test-retest reliability coefficient of .87.

The Piers-Harris Children's Self-Concept Scale was selected as the criterion measure for the self-concept construct. The Piers-Harris Children's Self-Concept Scale is a self-report developed especially for work with children. It can be easily administered in group form and requires only

a third grade reading level. The manual states that it is permissible to administer it to younger children below this level.

The original pool of items was developed from Harold's (1952) collection of statements made by children about what they liked and disliked about themselves. The present scale consists of eighty of the original 132 items to which the child responds yes or no.

The items are clearly stated and are balanced to reduce the effects of acquiescence. The items are generally stated as declarative sentences to avoid negative or double negatives which might serve to confuse the child.

In a factor analysis study utilizing 400 sixth graders, six factors emerged: statements of behavior, school related standing, physical appearance, anxiety, social popularity, and happiness. The author of the scale believes that the scale is in reality multidimensional and that the total score is most useful for research purposes (Klassen, 1978).

The instrument is appropriate for a wide range of situations and yields a full-scale as well as several sub-scale values. Internal consistency coefficients for the instrument ranged from .72 to .77. A relative low standard error of measurement was cited (8 pts.). The instrument yielded a correlation of .68 with Lipman's Children's Self-Concept Scale. Correlations with children's self-report

inventories ranged almost exclusively in the moderate range. Individuals with substantially depressed IQ scores scored significantly lower on the scales than did individuals with scores in the normal range. The overall criterion validity coefficients ranged from a low of .37 to a high of .66. Construct validity of the Parent-Teacher was demonstrated through the use of principle component analysis.

The Parent Attitude Survey (PAS) was selected to measure the criterion variable of parent attitude. This scale measures attitudes in the five areas of confidence, cooperation, acceptance, understanding, and trust. The PAS contains fifteen items in each of the five areas, with a total of seventy-seven items. Seventy-five of the items are scored, fifteen in each of the five categories. The first two items are set breakers and are not scored. One of the set breakers is an item with which nearly all parents would agree. The second item is a statement designed to reduce the tendency of some students to form a response set.

Each item in the scale consists of a statement for which the parent must mark one of the following five choices:

- Strongly agree . . . . . S.A. (-3)
- Agree . . . . . A. (-1)
- Definitely . . . . . D. (0)
- Disagree . . . . . D. (+1)
- Strongly disagree . . . . . S.D. (+3)

Statements are scored on a five-point scale with values ranging from +2 to -2 with undecided being scored zero. The algebraic sum of the item scores in each area serves as the parent's total score for a particular attitude area. Therefore, each parent receives five separate scores, one for each area.

The reliability of the five attitude scales was computed by means of the split-half method. The survey was administered to seventy-two parents whose children were attending elementary school in two school districts in the Austin, Texas, area. Reliability and inter-scale correlations were established. Internal consistency ranged from .44 for Acceptance to .44 for Understanding with a mean reliability of .46. An interscale correlation matrix was also computed to ensure that no overlap existed between scales. The intercorrelations were all positive ranging from .33 to .43 with a mean of .44.

According to Garretti (1978), no validity studies on this instrument have been done and researchers who have used it have relied on its content validity. It has frequently been used in studies assessing parental attitude change. Validation of the instrument was judged independently by five individuals who classified items according to their appropriateness for each of the five areas. An item was included in the scale unless three of the five reviewers agreed on its placement.



### Analysis of Data

The data collected in this study were analyzed using analysis of variance (ANOVA) and multivariate analysis of variance (MANOVA) and in terms of the attainment of the criterion specifications. Several methods were appropriate in this situation. In the case of the incidence of inappropriate behavior, a ten percent positive change per week criterion was established. Accordingly, each child was classified as to whether or not the objective was attained. The binary responses were analyzed as follows (for the experimental and control groups):

#### Chi Square Test for Change

$$\chi^2 = \sum \frac{(F_0 - F_n)^2}{F_0}$$

$$D.F. = 1$$

In addition, an information theory index was derived for the contingency that was constructed. It is defined as follows:

$$H(S) = - \sum_{j=1}^J P(S_j) \log P(S_j)$$

The measure was determined by

$$H(S) = H(S/A)$$

where  $P(B)$  is the probability of B, and  $P(B|A)$  is the conditional probability of B given A. An analysis of variance was also used to compare the mean percent of change per week of the experimental and control groups.

In the case of the attitudes of the parents and the self-concept of the students, posttest measures were analyzed, using multivariate analysis of variance. The model for the procedure is

$$Y = X\beta + \epsilon$$

where Y is the matrix of cell means, X is the appropriate design matrix,  $\beta$  is the matrix of parameters to be tested, and  $\epsilon$  is the appropriate error matrix. The overall multivariate test was completed for parent attitudes and student self-concept. Where a significant value was obtained, the univariate procedure was completed. Analysis of variance was used with the remaining dependent variable.

A summary of the criterion measures, design, and analysis procedures for the variables of this study can be found in Table 4.

#### Data Collection

The treatment took place from November, 1981, through the end of December, 1981. The data collection schedule is discussed on the following page:

TABLE 4

## PATTERN OF ANALYSIS AND DATA INTERPRETATION

<u>VARIABLE</u>	<u>CATEGORICAL PATTERN</u>	<u>SECTION</u>	<u>ANALYSIS</u>
Inappropriate behavior	Observation	B 01 X 03 B 03 X 04	Obs. Report, note for Chapter Information theory response
Self-concept	Therapist's interview Self-Concept Scale	B 03 03 B 03 04	REPORT
Behavior Management Scale	Behavior Management Scale	B 03 03 B 03 04	REPORT
Parent Attitudes Scale	Parent Attitudes Scale	B 03 03 B 03 04	REPORT, dichotomize F, Group Over B

1. The observational data on inappropriate behavior of students were assessed over a four-week period beginning with the third week of the treatment. Teachers and independent observers charted these data.

2. The Behavior Management vignette was given to parents following the sixth week of treatment. Parent trainers administered the instrument to experimental parents. Control parents were contacted by mail.

3. The Piers-Harris Children's Self-Concept Scale was administered to students ten weeks after the initiation of the treatment. The classroom teacher administered this instrument.

4. The Parent Attitude Survey Scale was administered to parents six weeks after the initiation of the treatment. Parent trainers administered the instrument to experimental parents. Control parents were contacted by mail.

The methodology for this study was selected to test the four hypotheses presented in Chapter I. The following chapter is an analysis of the data obtained from the implementation of the cognitive-affective-behavioral treatment.

CHAPTER IV  
RESULTS OF THE STUDY

The purpose of this study was to assess the effectiveness of a cognitive-affective-behavioral parent training program as a treatment for parents of learning disabled children. Specific instrumentation was used to test null hypotheses in four areas:

1. changes in parent attitudes resulting from parent training as measured by the Parent Attitude Survey;
2. changes in the behavior management skills of parents resulting from parent training as measured by the Behavior Management Inventory;
3. changes in the self-concept of children whose parents were trained as measured by the Parent-Child Children's Self-Concept Scale and;
4. changes in the classroom behavior of children whose parents were trained as measured by the Behavior Rating Chart.

The Parent Attitude Survey (PAS) was used to measure the effect of the RMP program on the attitudes of those parents who participated in the training as compared with the attitudes of parents who were in the control group and did not receive training. A multivariate analysis of variance of posttest mean scores was performed. Mean scores

TABLE 5  
 RESULTS OF THE MULTIVARIATE AND UNIVARIATE  
 ANALYSIS OF PARENT ATTITUDE DATA

Multivariate F Ratio = 4.91<sup>a</sup>, df 5, 48

Scale	Source of Variation	SS	df	MS	F
Confidence	Between	1551.688	1	1551.688	32.610 <sup>a</sup>
	Within	1548.368	44	35.213	
	Total	3100.056	45		
Coping Style	Between	423.648	1	423.648	18.363 <sup>a</sup>
	Within	2043.718	44	46.448	
	Total	2467.366	45		
Acceptance	Between	328.784	1	328.784	6.682
	Within	1769.321	44	40.212	
	Total	2098.105	45		
Understanding	Between	7.383	1	7.383	0.158
	Within	2213.455	44	50.306	
	Total	2220.838	45		
Trust	Between	38.888	1	38.888	0.812
	Within	4181.228	44	95.028	
	Total	4220.116	45		

NOTE: <sup>a</sup> = significant at .05 level

n = 48, 24 experimental and 24 control

and standard deviations for each dependent variable are presented in Appendix VII.) In addition, posttest measures for each of the five areas of the scale were analyzed, using analysis of variance. The results of the data pertaining to this hypothesis are presented in Table 4.

It was hypothesized that the mean score for the experimental group would not be significantly higher on the PA than the mean score for parents in the control group. A multivariate F-Ratio of 6.81 was obtained, a value which was significant at the .01 level of significance; therefore, the null hypothesis for parent attitude change was rejected. Each of the five areas of the PA was then analyzed, using analysis of variance.

It was hypothesized that the mean score for the experimental group would not be significantly higher on confidence in the parental role than the mean score for parents in the control group. It can be noted that the F-value for confidence in Table 5 was 10.440, a value which was significant at the .01 level of significance; therefore, the null hypothesis for the confidence area of the PA was rejected. Specifically, parents who participated in the training showed positive growth in confidence in themselves as parents.

It was hypothesized that the mean score for the experimental group would not be significantly higher on parental influence in the direction of the child's behavior, than

the mean score for the parents in the control group. It can be seen in Table 3 that the F-value for Coaxation was 13.303, which was significant at the .01 level of significance, therefore, the null hypothesis for the Coaxation area of the PAQ was rejected. Specifically, parents who participated in the training were more aware of the effect of their behavior on their children.

It was hypothesized that the mean score for the experimental group would not be significantly higher on Acceptance of the child's feelings and behavior, Understanding the importance of freedom of expression in communication between parents and children, and Trust in the individuality of the child, than the mean score for parents in the control group. It can be seen in Table 3 that the F-values for Acceptance, Understanding, and Trust were 4.032, 2.138, and 2.412 respectively, values which were not significant at the .01 level of significance. Therefore, the null hypothesis for each of these three areas of the PAQ were accepted.

It should be remembered that the PAQ measures self-assessed attitudes of parents and not the actual parent-child interaction that takes place. Nevertheless, as a result of their participation in parent education, experimental parents expressed more positive feelings of adequacy to meet the demands of parenthood and more



believe that their behavior was a powerful influence on the child.

#### Changes in Parental Behavior Management Skills

The Behavior Management vignette was utilized to assess changes in the behavior management skills of parents following participation in the parent education program as compared with the behavior management skills of parents in the control group that received no training. An analysis of variance design was employed. The data pertaining to the hypothesis are presented in Table 4.

TABLE 4  
ANALYSIS OF VARIANCE RESULTS FOR  
BEHAVIOR MANAGEMENT VIGNETTE

Source of Variation	SS	df	MS	F
Between	41.377	1	41.377	66.472*
Within	28.345	44	6.442	
Total	72.348	45		

NOTE: \* = significant at .05 level

n = 44, 24 experimental, 20 control

It was hypothesized that the mean score for the experimental group would not be significantly higher on the Behavior Vignette than the mean score for the parents in the control group. It can be seen in Table 4 that the

F-value was 49.891, which was significant at the .05 level of significance; therefore, the null hypothesis was not supported by the data and was not accepted. Specifically, parents who participated in training were better able to design an effective behavior management plan using behavior modification principles than were parents in the control group.

#### Children's Self-Concept

Change in self-assessed self-concept following parental participation in the parent training program was measured by the Fiese-Barris Children's Self-Concept Scale. Change was measured against a control group. An analysis of variance design was used for this purpose. The data for this instrument are presented in Table 7.

TABLE 7  
ANALYSIS OF VARIANCE RESULTS FOR  
FIESE-BARRIS CHILDREN'S SELF-CONCEPT SCALE

Source of Variation	SS	df	MS	F
Between	498.269	1	498.269	1.517
Within	1334.894	27	49.440	
Total	1833.163	28		

n = 15, 14 experimental, 13 control

It was hypothesized that the mean score for the experimental group would not be significantly higher on the Flanagan-Kravis Children's Self-Concept Scale than the mean score for parents in the control group. It can be noted in Table 7 that the T-value was 1.317, a value which was not significant at the .05 level of significance; therefore, the null hypothesis was accepted. Specifically, those learning disabled elementary school children whose parents participated in the parent training program did not show a significantly greater increase in self-perceived self-concept than did children whose parents were in the control group.

#### Changes in Observed Classroom Behavior

The changes in observable classroom behavior that could be seen following parental participation in the parent education program were recorded by the child's classroom teacher and graphed on the Behavior Rating Chart. A ten percent per week positive relative was established as the change criterion. Using the chi square test for change, each child in the experimental and control groups was classified as to whether or not the criterion had been met. The corrected chi square was 35.183, which was significant at the .01 level of significance.

An analysis of variance was also used to assess the effect of parent education on student behavior change. The

mean percent of change per week of the experimental group was compared to the mean percent of change per week of the control group. The results of that analysis are presented in Table 8.

TABLE 8  
ANALYSIS OF VARIANCE RESULTS FOR  
STUDENT BEHAVIOR CHANGE

Source of Variation	SS	df	MS	F
Between within	23281.418 26240.172	1 27	23281.418 708.734	32.803*
Total	49521.590	28		

NOTE: \* = significant at .01 level

n = 18, 28 experimental, 10 control

It can be noted in Table 8 that an F-value of 32.803 was obtained which was significant at the .01 level of significance. It was hypothesized that there would be no significant difference between the experimental and control students in observable classroom behavior. A significant difference in behavior change at the .01 level was found using both the chi square test for change and analysis of variance. Therefore, the null hypothesis was rejected.

Specifically, children in the experimental group showed a significant decrease in inappropriate behavior or a significant increase in appropriate behavior as compared to the control group whose parents did not participate in the parent education program.

In addition, an information theory index was derived for the ten percent per week change contingency that was constructed. An entropy coefficient of .87 was obtained. Therefore, simply knowing whether a student was in the experimental or control group reduced by sixty-seven percent the uncertainty of whether or not the criterion was attained.

A multiobserver approach was used to assess behavior change. The teacher was used as the primary observer and data just discussed were based on teacher observations. In addition, each child was observed one time in the classroom by an independent observer which permitted a blind check on the accuracy of the incidence counts. A Pearson  $r$  coefficient was used to determine scorer reliability. Pearson  $r$  coefficients of .89 and .86 were obtained for the experimental and control groups respectively. This indicated a high scoring consistency existed between independent observers and teachers for both experimental and control groups.

Additional Findings

Parent education was held at three different sites and involved three pairs of parent trainers. Therefore, it was important to determine if there were any significant differences in the results obtained between the school sites. While these data do not pertain specifically to the four hypotheses investigated, the data regarding this are important in assessing the effectiveness of the treatment.

The FAS was used to assess changes in parent attitude. An analysis of variance was done to determine if any significant differences in results existed between parent training sites. The results are presented in Table 9. There was no significant difference found at the .05 level of significance.

The Behavioral Yields was used to assess changes in parent behavior management skills. An analysis of variance was done to determine if any significant difference in results existed between training sites. The results are presented in Tables 10 and 11. There was no significant difference found for either the experimental or control group at the .05 level of significance.

The Piers-Harris Children's Self-Concept Scale was used to assess changes in student self-concept. An analysis of variance was done to determine if any significant difference in results existed between training sites. The

TABLE 3  
ANALYSIS OF VARIANCE FOR  
FAMILY ATTITUDE SCORES  
(BETWEEN SCHOOLS)

Scale	Source of Variance	SS	df	MS	F
Confidence:	Between	32.462	2	16.231	3.4612
	Within	2438.433	43	56.708	
	Total	2470.895	45		
Cautious:	Between	277.016	2	138.508	8.0983
	Within	2409.388	43	56.032	
	Total	2686.404	45		
Acceptance:	Between	84.830	2	42.415	3.4421
	Within	2675.115	43	62.235	
	Total	2759.945	45		
Understanding:	Between	81.810	2	40.905	3.6431
	Within	2236.877	43	52.044	
	Total	2318.687	45		
Trust:	Between	158.188	2	79.094	5.4665
	Within	4086.715	43	95.040	
	Total	4244.903	45		

n = 44, 24 experimental and 20 control.

TABLE 10  
ANALYSIS OF VARIANCE RESULTS FOR  
SERVICES MANAGEMENT YOUNGSTERS  
(EXPERIMENTAL GROUP, BETWEEN SCHOOLS)

Source of Variation	SS	df	MS	F
Between	0.807	2	0.404	0.018
Within	8.138	21	0.388	
Total	8.945	23		

n = 24

TABLE 11  
ANALYSIS OF VARIANCE RESULTS FOR  
SERVICES MANAGEMENT YOUNGSTERS  
(CONTROL GROUP, BETWEEN SCHOOLS)

Source of Variation	SS	df	MS	F
Between	3.467	2	1.734	0.718
Within	17.233	19	0.907	
Total	20.700	21		

n = 22



means are presented in tables 12 and 13. There was no significant difference found for either the experimental or control group.

TABLE 12  
ANALYSIS OF VARIANCE RESULTS FOR  
FIELD-BASED CHILDREN'S SELF-CONCEPT SCALE  
(EXPERIMENTAL GROUP, BETWEEN SCHOOLS)

Source of Variation	SS	df	MS	F
Between	18.443	2	9.221	8.091
Within	248.302	12	21.025	
Total	266.745	14		

n = 15

TABLE 13  
ANALYSIS OF VARIANCE RESULTS FOR  
FIELD-BASED CHILDREN'S SELF-CONCEPT SCALE  
(CONTROL GROUP, BETWEEN SCHOOLS)

Source of Variation	SS	df	MS	F
Between	148.034	2	74.017	0.105
Within	2448.408	12	204.034	
Total	2596.442	14		

n = 15

Change at the student level was assessed by using direct observations of behavior. An analysis of variance was done to determine if any significant differences in results existed between training sites. The results are presented in Tables 14 and 15. There was no significant difference found for either the experimental or control group at the .01 level of significance.

The interaction between student behavior change in the classroom and student self-concept was examined using a multivariate analysis of variance. A multivariate F-Ratio of 15.44 was obtained which was significant at the .01 level of significance. As previously reported, change in

TABLE 14  
ANALYSIS OF VARIANCE RESULTS FOR  
STUDENT BEHAVIOR CHANGE  
(EXPERIMENTAL GROUP, BETWEEN SCHOOLS)

Source of Variation	SS	df	MS	F
Between Schools	3470.870	3	1156.956	5.213
Within	14482.887	17	851.934	
Total	17953.757	20		

n = 20

TABLE 18  
ANALYSIS OF VARIANCE RESULTS FOR  
STUDENT BEHAVIOR CHANGE  
(CONTROL GROUP, BEMPER SCHOOLS)

Source of Variation	SS	df	MS	F
Between	134.691	2	67.346	1.267
Within	1182.359	16	73.897	
Total	1317.050	18		

n = 18

student behavior was significant at the .01 level of significance while change in student self-concept was not significant. A Pearson  $r$  correlation coefficient of .38 was obtained for these two dependent variables. Therefore, change in student behavior did not significantly influence student self-concept.

The responses of parents on the Parent Attitude Survey were assessed for internal consistency. Alpha coefficients for the five areas of the PA are presented in table 14. Internal reliability coefficients ranged from .8255 to .8844. This indicated a high internal consistency of parent responses on the attitude scales.

Finally, the reliability of children's responses on the Page-Barrie Children's Self-Concept Scale was examined.

TABLE 14  
ALPHA COEFFICIENT AND STANDARD  
ERROR OF MEASUREMENT FOR THE FIVE AREAS  
OF THE PARENT ATTITUDE SCALE

Scale	Alpha Coefficient	SEM
Confidence:	0.8886	4.2581
Cooperation:	0.7720	3.4572
Acceptance:	0.7821	3.3615
Understanding:	0.8581	3.3182
Total:	0.8255	4.8683

n = 44, 24 experimental and 22 control

An Alpha coefficient of .90 was obtained with a standard error of measurement of 3.94.

#### Summary of Findings

Data pertaining to the hypotheses formulated for this study reveal the following:

1. Parents who participated in the parent education program had significantly higher scores on the parent attitude instrument than the control group of parents. Specifically, the treatment parents showed significantly higher scores on the confidence and cooperative areas of the PAA.

2. Parents who participated in the parent education program were better able to develop a behavior management program for use with their child than the control group of parents.

3. Children whose parents participated in the parent education program did not significantly improve their self-assessed self-concept when compared to the control group of children.

4. Children whose parents participated in the parent education program significantly improved their observable behavior when compared to the control group of children.

5. A high scoring consistency was demonstrated between teachers and independent observers in the observation of student behavior in the classroom.

6. A low correlation was found between self-concept and behavior change.

7. There was no significant difference in results found between the three sites where parent education sessions were held for either the experimental or control groups.

8. Parent responses on the PAR demonstrated high inter-rater consistency.

9. A high reliability of children's responses on the Flora-Bartle was found.

A summary discussion of the implications of these findings as well as suggestions for future study in this area follows in Chapter 7.

CHAPTER V  
SUMMARY, CONCLUSIONS, RECOMMENDATIONS

The purpose of this study was to assess the effectiveness of a short-term parent education program developed by the Parent Education Exceptionalities Project (PEEP) in causing positive changes in parental attitudes, improving the behavior management skills of parents, improving the self-concept of learning disabled children, and causing positive observable behavioral changes in learning disabled children. The specific objectives of this study were to test parents' self-assessed attitudes using Berkeford's Parent Attitude Survey, parents' behavior management skills using a Behavior Management vignette, children's self-concept as measured by the Flagg-Burris Children's Self-Concept Scale, and observable classroom behavior as observed and recorded by teachers on the Behavior Rating Chart.

The population chosen for the study was parents of learning disabled children enrolled in grades kindergarten through sixth. The sample was drawn from the parents whose learning disabled children attended one of eight elementary schools (see Table II) in the Orange County, Florida, school district. Parent training took place at these elementary school sites. Parents' participation in the study was as

a voluntary basis and all parents who had children enrolled into a learning disabilities class at one of these eight schools were invited to attend a parent education class being offered in their vicinity. The parents of thirty-nine such children participated in the study. At each training site they were randomly assigned to experimental and control groups. The children were grouped with their parents for the purposes of statistical analysis but did not attend any of the parent education sessions.

Each parent group was run by two parent trainers who received equivalent training. The parent trainers met with the treatment parents for a total of two hours once a week for six weeks. The treatment model was the Parent Educator from Exceptionalities Program (PEEP) designed by the Parent Education Exceptionalities Project. The course was taught in its entirety with no variations. Experimental parents were posttested with the Parent Attitude Survey and the Behavioral Symptom at the final session. Posttesting for the control group parents began at the same time for these two instruments and was done through the mail. Children were posttested with the Ferre-Bernis Children's Self-Concept Scale four weeks after the final parent session. Charting of observable behaviors for experimental and control children was begun during the third week of parent



training and continued for four weeks. Assessment instruments for both parents and children were scored and submitted to the computing center at the University of Central Florida for analysis.

Parent attendance was aided by the provision of baby-sitting services for those in need. These services were provided by the Parent Education Exceptionalities Project at no cost to parents.

Parents were awarded in the statistical analysis if they attended five of the six parent education sessions. Parents were allowed to make up any sessions that were missed by contacting the parent trainer and coming early to the next session.

#### Discussion of the Results

Four main hypotheses were investigated. All were related to the effects of the cognitive-affective-behavioral parent education program on the four dependent variables of attitude change, knowledge of behavior management, self-concept, and measurable change in behavior. The level of significance that was established for rejection or acceptance of the hypotheses was at the .05 level of confidence. Analysis of variance and multivariate analysis were the principal methods of analysis used to test each hypothesis. The chi square test for change was also used in the assessment of student behavior change. All four hypotheses were tested in the null form.

Significant differences were found between the experimental and control group of parents in terms of two areas of attitudinal change on the PAI. Parents in the experimental group had significantly higher scores in the Confidence area. This indicated that parents in the experimental group were more sure of themselves as parents and saw parenting as being a less difficult, time-consuming, and thankless task. Parents in the experimental group also had a significantly higher score in the Control area. This scale measured the dimension of control or coherent causation as attributed to environmental or parental influences. Parents in the experimental group indicated that they had more influence over the behavior of their child than did parents in the control group. There were no significant differences found in the other three areas measured by the PAI which are Acceptance, Understanding, and Trust.

A significant difference was also found between the experimental and control parents in their ability to develop an appropriate behavior management plan. It should be pointed out that the Behavior Checklist does not provide data on the implementation of such a behavior management program. However, it does indicate that parents who participated in the training process gained the necessary factual knowledge to set up a behaviorally sound management plan to use in modifying behaviors exhibited by their children.

This study also investigated whether or not change in the self-concept of learning disabled children could be brought about through parent training. The data do not support an affirmative answer to this question. The self-assessed self-concept of both experimental and control students was measured four weeks after the completion of parent training. If there were any changes resulting from parent participation in the short-term parent program, they were not detected after such a short period of time.

The final hypothesis investigated in this study dealt with the effect of parent training on observable classroom behaviors. A significant change in positive student behavior was found favoring the students in the experimental group. Parents and teachers working together decreased the frequency of inappropriate student behavior in the classroom or increased the frequency of appropriate student classroom behavior. The rejection of the null hypothesis related to behavior change at the student level was supported by the observations of independent observers.

The relationship between student behavior change and self-concept was also investigated. It was found that there was no significant relationship between these two variables.

Since parent education was conducted at three different sites and parent groups were run by three different

point of parent trainers, it was important to find out that there were no significant differences found between the three experimental and three control groups on any of the four hypotheses examined. Apparently, neither the location of the parent education sessions nor the parent trainers themselves were a variable affecting the outcome of the treatment.

### CONCLUSIONS

The small population of the study is recognized as a limitation that must be considered in making broad generalizations. However, based on the analysis of data, the following conclusions were reached:

1. Participation in the PEPP parent education program helped parents of learning disabled children become more confident in their child-rearing ability and become more aware of their ability to help their child with his problems.

2. Participation in the PEPP parent education program provided parents of learning disabled children with the necessary skills to develop a behaviorally sound management plan to use with their children.

3. Participation in the PEPP program did NOT result in a change in the self-concept of learning disabled children. Improvement in observable classroom behavior was not related in a significant way to

improvement in self-concept. Cronbach (1960) said that it is more reasonable to interpret self-report of self-concept as a statement of the child's typical behavior or of his private self-concept. He added that public self-concept should correspond in some way to a child's behavior, but the unresolvable distortion in self-observation reduces this correspondence. Therefore, despite the fact that the learning disabled students in the experimental group improved their classroom behavior, a corresponding improvement in student self-concept was not found.

4. Participation in the PEP program by parents of learning disabled children led to a positive change in their children's observable classroom behavior. This is perhaps the most significant finding of the study. The literature reviewed in Chapter II suggested quite strongly that parent education can have a significant effect on the school success of the child. Very few studies have tested this hypothesis by direct observation of behavior in the classroom, however. This study was a first step toward change in behavior at the student level and found that parent education could successfully influence observable student behavior.

### Recommendations

The following are recommendations for future research with this cognitive-affective-behavioral parent education program. Included are recommendations for conducting effective parent education groups.

1. Future research on the FEP parent education program should involve parents of learning disabled children in more restrictive school environments. Only those parents whose children were in specific learning disabilities resource rooms were included in this study. Parents whose children attend classes in self-contained schools would be an appropriate target group for additional study.

2. Future research with the FEP parent education program should involve a more exact determination of the demographic characteristics of the parent volunteer group. This study did not attempt to develop a demographic profile on each parent. Therefore, no conclusions can be drawn about the characteristics of parents most likely to participate.

3. A follow-up study of the parents participating in the experimental and control groups of this study should be undertaken. Such a longitudinal study would indicate whether the dependent variables in this study remained the same or moved in a positive or negative

duration over time. Specifically, did parents in the experimental group retain their knowledge of behavior management principles, did the classroom behavior of experimental students continue to show improvement, and did the attitudes of experimental parents remain positive? Also, it would help to determine if student self-concept is a variable requiring a longer period of time to evidence change.

4. The cognitive component of the treatment was designed to provide parents with factual information about the causes of their child's learning disability. Parents were also shown educational and medical interventions commonly used to help learning disabled children compensate for their disability. Parent responses on the PRE indicated that treatment parents did have more positive attitudes on the cognitive area of that instrument which indicated that the cognitive component did have a positive influence on parent attitudes. It would be helpful if additional assessment instruments could be used to support this conclusion.

5. The behavioral component of the treatment was designed to improve parent behavior management skills so that parents could change the behavior of their learning disabled children. The results of this study indicated that the behavioral component did provide parents with

the necessary skills to positively change the behavior of their children. The success of parents in changing student behavior may also have been a factor leading to their increased confidence in themselves as parents as was demonstrated on the Fig. Behavior modification would seem to be an important ingredient to include in any parent program that seeks rapid behavior change. The power of the behavioral approach was not diminished by its interaction with cognitive and affective components.

6. The effect of the affective component was more difficult to isolate than the cognitive or behavioral components. The affective component was designed to increase group cohesiveness by showing parents that their emotional reactions and styles of parenting were shared by other parents. The affective component may well have been a factor contributing to the very low drop-out rate of treatment parents. Future research should examine the effect on the treatment results, both statistical and non-statistical, of eliminating this affective component.

7. This study focused on the changes in student behavior that took place in the classroom. A research project extending this assessment of behavior change into the home would seem to be warranted. The difficulty of validation by independent observation is obvious.



However, parent observations of their child's behavior could be validated i.e., in addition to a single behavioral count, each parent kept a descriptive diary of the observed behavior. The impact of the treatment would be even greater if it could be demonstrated that both school and home behavior showed significant improvement.

8. Several studies have used the PARCEL ATTITUDE SURVEY as the primary instrument to assess parent attitude change. As Diamond (1978) recommended, a validation and standardization study of this instrument would be beneficial. Data in this study indicated that there was high inter-rater consistency in parent responses. This and data from other studies should be used to strengthen the confidence with which results obtained from the PARCEL can be viewed.

9. This study did not try to determine if differences existed between mothers and fathers who attended parent education. Future research should include an examination of this factor to determine its effect on the dependent variables.

10. The six week time period required to complete the parent training should be reduced to five weeks by eliminating the off-week following the fifth session. Many parents and parent trainers indicated this off week was unnecessary and could lead to parent attrition.

11. An important aspect of a successful parent education program that is frequently overlooked is the availability of babysitting services. Consistent with parents attending the parent sessions reinforced that point. This is a relatively inexpensive addition to the total cost of running a parent group and greatly increases the prospects of parents attending. This could have been an important factor contributing to the overall positive results found in this study. Additional research on the cognitive-affective-behavioral program should consider this variable by employing an additional treatment group whose parents do not receive babysitting services.

12. Teacher cooperation is an important aspect in the success of any parent education program. It would be beneficial to provide every teacher with a brief overview of the parent program and acquaint them with the objectives the program has for parents. This will lay the groundwork for increased parent-teacher interaction.

13. It is important to prepare parent trainers on the mechanics of conducting parent groups in addition to teaching them the content and process of the program. The importance of such things as notifying parents, having refreshments, sending weekly reminders, and having name tags cannot be overlooked. Creating a warm

environment and making each parent feel like a part of the group have been cited by several parent education groups, 1988; Binkoway, 1973) as important factors in parent education.

14. Having two parent trainers for each parent group is advisable for several reasons. First, each trainer provides support for the other trainer. Second, it affords a parent trainer the opportunity to meet individually with a parent to discuss an individual problem without halting other group activities. Most importantly, if one parent trainer cannot attend a session, the session does not have to be cancelled, an occurrence which can be ruinous to a parent group.

15. Finally, as with many research studies, it would be desirable to increase the number of subjects that participated in the study. This would allow the conclusions reached by this study to be generalizable to a wider population.

This study was conducted with the expectation that the effectiveness of a newly developed parent education program would be determined. It is to be hoped that the data generated by this study can be used to give guidance to parent educators in deciding on an approach to use in working with parents of learning disabled children.

## APPENDIX

APPENDIX 1

PARENT EDUCATION PROGRAM

For S.L.D. Students

-----

\_\_\_\_\_ and \_\_\_\_\_

S.L.D. teachers at Shawsdoak Elementary School, will be offering an exciting and useful series of parent workshops on the following topics:

1. Learning the Facts about learning disabilities
2. Learning to Cope with family feelings about learning disabilities
3. Learning techniques on how to better help the learning disabled child be successful.

This program is being sponsored by the Parent Education Exceptionalities Project of the Orange County Public Schools. Submitting services will be provided at the school.

NOTE:

NAME:

HOW OFTEN:        5 weekly sessions  
                         1 follow-up session

SEE YOU THERE!

-----

NOTE: Please check which response you prefer and return this portion.

\_\_\_\_\_ Yes, I would like to attend.

\_\_\_\_\_ No, I would not like to attend.

\_\_\_\_\_ I would be interested in attending the program during the school year if it was offered again at another time.

APPENDIX II  
PARENT ATTITUDE SURVEY

Instructions

On the following pages are a number of statements regarding parents and children. Please indicate your agreement or disagreement with each statement in the following manner:

Strongly Agree	--cross out letter "A"
Agree	--cross out letter "a"
Undecided	--cross out letter "u"
Disagree	--cross out letter "d"
Strongly Disagree	--cross out letter "D"

For example: if you strongly agree with the following statement, you would mark it in this way:

Boys are more active than girls.                   A a u d D

This survey is concerned only with the attitudes and your own ideas that parents have. There are no "right" or "wrong" answers. Work just as rapidly as you can--it is your first impression that we are interested in. There is no time limit.

REMEMBER: . . . . .                   A = Strongly Agree  
                                          a = Agree  
                                          u = Undecided  
                                          d = Disagree  
                                          D = Strongly Disagree

1. Parents have to sacrifice everything       A a u d D  
for their children.
2. Parents should help children feel        A a u d D  
they belong and are needed.
3. Taking care of a small baby is         A a u d D  
something that no woman should be  
expected to do all by herself.
4. When you come right down to it, a        A a u d D  
child is either good or bad and  
there's not much you can do about it.

5. The earlier a child is weaned from its crutched tent to its parents the better it will handle its own problems.      A   A   C   B   E
6. Much of the time giving advice to children is a waste of time because they either don't take it or don't need it.      A   A   A   A   F
7. It is hard to let children go and visit people because they might mis-behave when parents aren't around.      A   A   A   D   C
8. Fewer people are doing a good job of child-rearing now than 10 years ago.      A   A   A   D   C
9. With all a child hears at school and from friends, there's little a parent can do to influence him.      A   A   C   C   C
10. If a little girl is a tomboy, her mother should try to get her interested in dolls and playing house.      A   A   A   C   B
11. A child has a right to his own point of view and ought to be allowed to express it, just as parents express theirs.      A   A   C   B   B
12. If children are quiet for a while you should immediately find out why.      A   A   A   B   B
13. It's a rare parent who can be even-tempered with the children all day.      A   A   A   B   D
14. Psychologists now know that what a child is born with determines the kind of person he becomes.      A   A   A   B   D
15. One reason that it is hard to see children grow up is because they said you were when they are babies.      A   A   C   B   D
16. The trouble with trying to understand children's problems is they usually just make up a lot of stories to keep you interested.      A   A   C   B   D

17. A mother has a right to know every-  
thing going on in her child's life  
because her child is a part of her. A a u d B
18. Most parents aren't sure what is  
the best way to bring up children. A a u d B
19. A child may learn to let a juvenile  
delinquent from playing games like  
pops and matters and war too much. A a u d B
20. There is no reason why a child  
should not learn to keep his  
clothes clean very early in life. A a u d B
21. If a parent sees that a child is  
right and the parent is wrong, they  
should admit it and try to do some-  
thing about it. A a u d B
22. A child should be allowed to try out  
what it can do at times without the  
parents watching. A a u d B
23. It's hard to know what to do when a  
child is afraid of something that  
won't hurt him. A a u d B
24. Most all children are just the same  
at birth; it's what happens to them  
afterwards that is important. A a u d B
25. Playing with a baby too much should  
be avoided since it wakes them  
and they won't sleep. A a u d B
26. Children shouldn't be asked to do  
all the housework without a  
chance to express their side of  
things. A a u d B
27. Parents should make it their business  
to know everything their children  
are thinking. A a u d B
28. Raising children isn't as hard as  
most parents let on. A a u d B



19. There are many things that influence a young child that parents don't understand and can't do anything about. A a u d B
20. A child who wants too much affection may become a "sitter" if he is given too much. A a u d B
21. Family life would be happier if parents made children feel they were free to say what they think about anything. A a u d B
22. Children must be told exactly what to do and how to do it or they will make mistakes. A a u d B
23. Parents sacrifice most of their fun for their children. A a u d B
24. Many times parents are punished for their own sins through the bad behavior of their children. A a u d B
25. If you put too many restrictions on a child, you will stunt his personality. A a u d B
26. Most children's fears are so unreasonable it only makes things worse to let the child talk about them. A a u d B
27. It is hard to know when to let boys and girls play together when they can't be seen. A a u d B
28. I feel I am faced with more problems than most parents. A a u d B
29. Most of the bad traits children have like nervousness or bad temper are inherited. A a u d B
30. A child who misbehaves should be made to feel guilty and ashamed of himself. A a u d B

41. Family conferences, which include the children, don't usually accomplish much. P T A U D D
42. It's a parents' duty to make sure he knows a child's innermost thoughts. A T A U D D
43. It's hard to know whether to be playful rather than dignified with children. A T A U D D
44. A child that comes from bad stock doesn't have much chance of amounting to anything. A T A U D D
45. A child should be weaned away from the bottle or breast as soon as possible. A T A U D D
46. There's a lot of truth in the saying, "Children should be seen and not heard." A T A U D D
47. If rules are not closely enforced, children will make them and get into trouble. A T A U D D
48. Children don't realize that it mainly takes suffering to be a good parent. A T A U D D
49. Some children are so naturally headstrong that a parent can't really do much about them. A T A U D D
50. One thing I cannot stand is a child's constantly wanting to be held. A T A U D D
51. A child's ideas should be seriously considered in making family decisions. A T A U D D
52. Wise parents should make it their job to know everything their child is doing. A T A U D D
53. Few parents have to face the problems I find with my children. A T A U D D

34. Why children behave the way they do is too much for anyone to figure out. A A U D D
35. When a boy is cowardly, he should be forced to try things he is afraid of. A A U D D
36. If you let children talk about their troubles they end up complaining even more. A A U D D
37. An alert parent should try to learn all his child's thoughts. A A U D D
38. It's hard to know when to make a rule and stick to it. A A U D D
39. Not even psychologists understand exactly why children act the way they do. A A U D D
40. Children should be toilet-trained at the earliest possible time. A A U D D
41. A child should always accept the decision of his parents. A A U D D
42. Children have a right to activities which do not include their parents. A A U D D
43. A parent has to suffer much and say little. A A U D D
44. If a child is born bad there's not much you can do about it. A A U D D
45. There's no acceptable excuse for a child hitting another child. A A U D D
46. Children should have a share in making family decisions just as the grown-ups do. A A U D D
47. Children who are not watched will get in trouble. A A U D D
48. It's hard to know what healthy new ideas are. A A U D D

68. A child is destined to be a certain kind of person no matter what the parents do. A a u d B
69. It's a parent's right to refuse to put up with a child's nonsense. A a u d B
70. Talking with a child about his fears most often makes the fear seem less important than it is. A a u d B
71. Children have no right to keep any thing from their parents. A a u d B
72. Raising children is a nerve-racking job. B a u d C
73. Some children are just naturally bad. B a u d C
74. A child should be taught to avoid fighting no matter what happens. B a u d C
75. Children don't try to understand their parents. B a u d C
76. A child should never keep a secret from his parents. B a u d C

## APPENDIX III

### BEHAVIOR MANAGEMENT YOUNG

Sally is really giving her mother a hard time. Every time Mom asks Sally to do something, Sally has an answer. If Mom continues the argument, Sally just gets louder and more rude. Usually Mom ends up going to her own room in tears.

Sally's mom visited her teacher to find out if she was having the same kinds of problems. The teacher reported that Sally was well behaved and even very quiet at times. Her behavior in school has gotten bad and she's developing a real talent.

Sally's father usually has no problems getting Sally to do what he asks of her. He lately, Mom has been telling Sally what she'll have to do when he gets home.

explain what Sally's mother should do in order to deal with the problem. Be specific. Give her either a step by step explanation of what she could do.

APPENDIX IV

VIDEOCINE SCRIPT

**NARRATOR:** "The following two scenes are designed to help you learn to identify a target behavior and then count the frequency of that behavior. Each scene will be shown twice. During both showings, pinpoint the inappropriate behavior and count the number of times that behavior occurs."

VIDEOCINE A

**CHARACTERS:** Two Boys

**SETTING:** The children are sitting at a table working on their homework.

(There is no dialogue in this scene. One boy periodically bothers the other boy by making noises. This occurs on 7 occasions. The sounds include, i.e. an animal sound, tapping of pencil, humming a tune, tapping the floor with his hand, drawing his fingers on the table.)

VIDEOCINE B

**CHARACTERS:** Teacher and six children

**SETTING:** The children are sitting at the table with a pencil and paper waiting to be given directions.

**TEACHER:** "Now, if you will . . ."

**JOHN:** "I don't like this stuff!" (Inter-  
ruption)

**TEACHER:** "Children, I want you to . . ."

- JOHN: "What time is recess?" (Interruption)
- TEACHER: "John, please see's until later. Right now we have to hear the directions for our assignment.  
So, if you will . . ."
- JOHN: "My pencil needs sharpening." (Interruption)
- TEACHER: "You can sharpen your pencil after I finish giving the directions. Now, put your name at the top left of the paper." (The children follow directions.) "Now, number your paper . . ."
- JOHN: (Throws pencil in the air and it lands on the table, disrupting the teacher.) (Interruption)
- TEACHER: (Tries to ignore John. John will be picks up his pencil.) "Please number your papers down the left side from one to ten."
- CHILDREN: (Follow directions.)
- TEACHER: "Okay, the spelling words for today are . . ."
- JOHN: "Hey, Paula's paper has a corner torn off." (Interruption)

APPENDIX V

PIERS-HARRIS CHILDREN'S SELF-CONCEPT SCALE

Here are a set of statements. Some of them are true of you and so you will circle the yes. Some are not true of you and so you will circle the no. Answer every question even if some are hard to decide, but do not decide both yes and no. Sometimes, circle the yes if the statement is generally like you, or circle the no if the statement is generally not like you. There are no right or wrong answers. Only you can tell us how you feel about yourself, so we hope you will mark the way you really feel inside.

- |                                                              |     |    |
|--------------------------------------------------------------|-----|----|
| 1. My classmates make fun of me.....                         | yes | no |
| 2. I am a happy person.....                                  | yes | no |
| 3. It is hard for me to make friends.....                    | yes | no |
| 4. I am often sad.....                                       | yes | no |
| 5. I am smart.....                                           | yes | no |
| 6. I am shy.....                                             | yes | no |
| 7. I get nervous when the teacher calls<br>on me.....        | yes | no |
| 8. My looks bother me.....                                   | yes | no |
| 9. When I grow up, I will be as important<br>person.....     | yes | no |
| 10. I get worried when we have tests in school.....          | yes | no |
| 11. I am unpopular.....                                      | yes | no |
| 12. I am well behaved in school.....                         | yes | no |
| 13. It is usually my fault when something goes<br>wrong..... | yes | no |
| 14. I never trouble my family.....                           | yes | no |
| 15. I am strong.....                                         | yes | no |
| 16. I have good ideas.....                                   | yes | no |

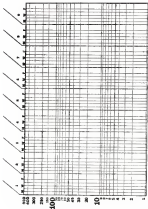


17. I am an important member of my family.....yes no
18. I usually went my own way.....yes no
19. I am good at making things with my hands. ....yes no
20. I give up easily.....yes no
21. I am good in my school work.....yes no
22. I do many bad things.....yes no
23. I can draw well.....yes no
24. I am good in music.....yes no
25. I behave badly at home.....yes no
26. I am slow in finishing my school work.....yes no
27. I am an important member of my class.....yes no
28. I am nervous.....yes no
29. I have pretty eyes.....yes no
30. I can give a good report in front of the class.....yes no
31. In school I am a leader.....yes no
32. I pick on my brother(s) and sister(s).....yes no
33. My friends like my ideas.....yes no
34. I often get into trouble.....yes no
35. I am obedient at home.....yes no
36. I am lucky.....yes no
37. I worry a lot.....yes no
38. My parents expect too much of me.....yes no
39. I like being the way I am.....yes no
40. I feel left out of things.....yes no
41. I have been hurt.....yes no

42. I often volunteer in school.....yes no
43. I wish I were different. ....yes no
44. I sleep well at night.....yes no
45. I hate school.....yes no
46. I am among the last to be chosen for teams. ....yes no
47. I am sick a lot.....yes no
48. I am often seen in other people's.....yes no
49. My classmates in school think I have good  
ideas.....yes no
50. I am outgoing.....yes no
51. I have many friends.....yes no
52. I am cheerful.....yes no
53. I am dumb about most things.....yes no
54. I am good looking.....yes no
55. I have lots of pep.....yes no
56. I get into a lot of fights.....yes no
57. I am popular with boys.....yes no
58. People pick on me.....yes no
59. My family is disappointed in me.....yes no
60. I have a pleasant face.....yes no
61. When I try to make something, everything  
seems to go wrong.....yes no
62. I am picked on at home.....yes no
63. I am a leader in games and sports.....yes no
64. I am clumsy.....yes no
65. In games and sports, I watch instead  
of play.....yes no

66. I forget what I learn.....yes 50
67. I am easy to get along with.....yes 50
68. I lose my temper easily.....yes 50
69. I am popular with girls.....yes 50
70. I am a good reader.....yes 50
71. I would rather work alone than with a  
group.....yes 50
72. I like my teacher (strict).....yes 50
73. I have a good figure.....yes 50
74. I am often afraid.....yes 50
75. I am always dropping or breaking things.....yes 50
76. I can be trusted.....yes 50
77. I am different from other people.....yes 50
78. I think bad thoughts.....yes 50
79. I cry easily.....yes 50
80. I am a good person.....yes 50

APPENDIX VI  
SEAWATER BAITING CHART



APPENDIX VI  
 MEANS AND STANDARD DEVIATIONS  
 FOR THE FOUR DEPENDENT VARIABLES

INSTRUMENT	GROUP	MEAN	STANDARD DEVIATION
<b>French Attitude Survey</b>			
Confidence	Experimental	38.7500	5.3873
	Control	46.7321	5.8924
Cooperation	Experimental	38.3433	6.3240
	Control	34.9545	7.3774
Acceptance	Experimental	35.7883	4.4858
	Control	38.1818	7.2331
Understanding	Experimental	35.3500	6.4751
	Control	33.9455	5.2557
Trust	Experimental	34.3437	5.2444
	Control	34.8082	10.1333
<b>Behavior Management Technique</b>			
	Experimental	3.5769	0.4933
	Control	1.6058	1.8088
<b>Self-Concept Scale</b>			
	Experimental	55.4068	13.8143
	Control	68.3833	18.3788
<b>Behavior Change</b>			
	Experimental	48.3500	14.3313
	Control	-0.4216	8.4488

## BIBLIOGRAPHY

- Asanuma, A. Psychological Testing (4th ed.). New York: Macmillan, 1976.
- Agnew, A. Establishing willing responses in a twenty-month-old child by a parent trained in OPERANT CONDITIONING. M.S. THESIS, PHS Washington Central Supervisory Center, 1974.
- Beck, E. Some training of parents and their mentally retarded children (University of Toronto, 1971). Mississippi State Abstracts International, 1972, 22, 4176-A.
- Baker, E.L. Support systems for the parent as a therapist: research to practice in mental retardation, 1977, 2, 213-218.
- Barnes, E.M. The parent of the handicapped child: The study of child rearing practices. Springfield, IL: C. Thomas Publishing Company, 1968.
- Bass, H.E. Some dynamic factors reflecting family adjustment to the handicapped child. Exceptional Children, 1967, 33, 387-393.
- Becker, M.C. Parents and teachers: A child management program. Champaign, IL: Research Press, 1971.
- Becker, M.C., Madson, C.H., Jr., Arnold, S., & Thomas, D.B. The contingent use of teacher attention and praise in reducing classroom behavior problems. Journal of Special Education, 1967, 1, 387-397.
- Birnbaum, A. The mentally retarded child in the home and the family circle. Journal of Health and Social Behavior, 1971, 12, 38-43.
- Bishop, J.R. Attitude change by parents of trainable mentally retarded children as a result of group discussion. Exceptional Children, 1962, 28, 383-388.
- Bisberg, A. The training of parents of profoundly and severely mentally retarded children in teaching behavior. M.S. THESIS, WV. West Virginia University, 1971.

- Boyd, E.D. Systematic parent training through a home based model. Exceptional Children, 1979, 47, 447-448.
- Brisson, J.D., & Thomas, E.B. Rearing the disabled child: A framework for further research. Journal of Abnormal Psychology, 1979, 88, 185-188.
- Castell, S.T., & Stanley, J.C. Experimental and quasi-experimental designs for research. Chicago: Rand McNally College Publishing Company, 1983.
- Carpenter, S.L., & Kupertine, L.S. A pilot training program for parent-educators. Journal of Speech and Hearing Disorders, 1979, 14, 42-58.
- Cassidy, J.D. A study of socio-economic status, parental child rearing attitudes, and verbal adjustment in these factors relate to the rate of progress in special education for dyslexics in a given population of children (The Catholic University of America, 1970). Dissertation Abstracts International, 1970, 11, 2428-K.
- Chasen, L.B. The effects of parent training in behavior modification and transactional analysis on the reading achievement, school attitudes, and self-concept of remedial readers in a remedial reading program (Temple University, 1978). Dissertation Abstracts International, 1978, 19, 2198-a.
- Clement, P.W., Roberts, P.Y., & Lewis, C.E. Mothers and peers as child behavior therapists. International Journal of Group Psychotherapy, 1979, 49, 103-108.
- Cohen, S.S. Critique of a model parent education program (Columbus University, 1977). Dissertation Abstracts International, 1979, 19, 89-a.
- Conference Report of Administrators and Coordinators of District and State Programs for Exceptional Education, Tallahassee, Fla. Florida Department of Education (Division of Public Schools), March 1981.
- Cook, J.S. Cross-sectional analysis of child-rearing attitudes of parents of handicapped children. American Journal of Mental Deficiency, 1983, 88, 384-387.
- Coombes, L.F. Principles of psychological testing (2nd ed.). New York: Harper and Row, 1948.

- Skinner, D. The parent "O" group. PERSONAL AND Guidance Journal, 1973, 12, 282-288.
- Skinner, D., & McKay, G. Systematic training for effective parenting. Circle Pines, MN: American Guidance Services, 1978.
- Silow, R.F. Observed maternal reaction to child behavior as a function of parent training (The Florida State University, 1978). DISSERTATION Abstracts International, 1979, 18, 2004-A.
- Smiley, C.S. The development and evaluation of a program for parent training in family relationships and management skills (Indiana University, 1971). DISSERTATION Abstracts International, 1971, 11, 1823-A.
- Solley, S.A.S. A behavioral assessment of an intervention training program for parents (Wayne State University, 1981). DISSERTATION Abstracts International, 1982, 22, 1491-A.
- Susan, B. The impact of a handicapped child upon the family. Paper presented at the Family/Issue Model Training Workshop, Pennsylvania, May 1977.
- Telby, L.B. Group parent training: An analysis of parent training with classroom in hand. A YOUNG CHILD. Lawrence, KS: EARLY Childhood Institute for the Early Childhood Education of the Handicapped, February 1978.
- Taylor, E. Perceptions of crisis and related variables as the impact of a retarded child on the mother. JOURNAL of Health and Human Behavior, 1978, 1, 108-118.
- Tisch, G.B. The effectiveness of using educational games to increase knowledge of behavioral principles in parents (The Ohio State University, 1978). DISSERTATION Abstracts International, 1979, 18, 4803-A.
- Florida Education Finance Report. Orange County, FL: Department of Student Services and Exceptional Education, February, 1981.
- Too, S.A. The handicapped family. JACHT, 1973, 1, 480-481.



- Deward, E.S., & Saxon, S.A. Preparation of a disturbed deaf child for therapy: A case description in behavior shaping. Journal of Speech and Hearing Disorders, 1971, 16, 501-509.
- Wilford, S.M., & Hartman, S.P. Behavior therapy with children: A review and evaluation of research methodology. Psychological Bulletin, 1969, 72, 204-218.
- Giannotti, T.J. Changes in self-concept and perception of parental behavior among learning disabled elementary school children as a result of parent effectiveness training III. John's University, 1978. Dissertation Abstracts International, 1979, 18, 4137-A.
- Goldstein, S.A. The relationship between participation variables and the perceived learning needs of the parents of handicapped children. The American University, 1979. Dissertation Abstracts International, 1980, 19, 2890-A.
- Gordon, T.J., & Bernstein, M.P. (Eds.) Building effective home-school relationships. Boston: Allyn and Bacon, Inc., 1978.
- Gordon, T. Parent effectiveness training: The 90-1000 program for raising responsible children. New York: Peter W. Lang Publishing, 1971.
- Greenman, F.E. Mothers and sisters of retarded children. Psychology Today, 1973, 1, 92-104.
- Grinath, S.J., & Gordon, T.J. School performance as a function of early stimulation. Glenville, FL: Institute for the Development of Human Resources, 1974.
- Kahn, S.B. A comparison of the academic performance of learning disabled children when their parents participated in a structured or informal parent program. University of Kansas, 1974. Dissertation Abstracts International, 1974, 13, 814-A.
- Hall, V.E. Managing behavior: Applications in school and home. Lincoln, NE: I and T Publications, Inc., 1971.
- Hartman, S.P. New developments in behavior modification with children. ERIC Document Reproduction Service, 1970. ED 015 187.

- Waters, L.F. Professional precursors and the evolution of parent training strategies. Research in Psychology in Social REHABILITATION, 1977, 1, 205-227.
- Wendland, C.F. Changing parental attitudes through group discussion. Austin, TX: University of Texas Press, 1968.
- Wetrick, E.E.M. Training parents of children in facilitative communication skills. Journal of Learning Disabilities, April 1979, 12, 275-277.
- Wheeler, L., Lindhorst, A., Nissen, K., & Ryan, E. Simulation workshop for parents: evoking empathetic responses. Academic Therapy, September 1979, 11, 4-11.
- Woods, L., & Smith, G. Behavior technology: Motivation and contingency management. SAN FRANCISCO, CA: TECHNICAL Learning Systems, 1981.
- Woodward, S.B., Maxwell, S.E., Wines, A.L., Boynton, E.A., & Koenig, W.M. Is a behavioral measure the best estimate of behavioral parameters? Perhaps not. Applied Psychological Measurement, Summer 1980, 4, 293-301.
- Wulfsberg, A.S. A rational child management approach to parent education (University of Oregon, 1978). SLACK-PARKSON ABSTRACTS INTERNATIONAL, 1979, 11, 3400-A.
- Jacobs, A.S. Effectiveness of modifying child management behavior of parents as a result of training in operant procedures (George Peabody College for Teachers, 1972). SLACK-PARKSON ABSTRACTS INTERNATIONAL, 1973, 11, 3438-A.
- James, M. Transitional analysis for sons and daughters. Reading, MA: Addison-Wesley, 1974.
- Jewell, A.T. To reach of self. New York: Teachers College, Columbia University Press, 1952.
- Keddington, J.E. Development and evaluation of a program to improve classroom behavior of emotionally handicapped children through parental social reinforcement (University of Utah, 1970). SLACK-PARKSON ABSTRACTS INTERNATIONAL, 1970, 11, 2184-A.
- Koppers, E.L., & Coplan, E. Group counseling with academically able underachieving students. San Diego Social Studies Education Research Bulletin, 1982, 11, 17-20.

- Keane, T.L., & Tyler, W. Comparing ways of raising parent-child interactions. Seattle, WA: University of Washington, July 1979.
- Krohn, B. Strategies for effective parent-teacher interaction. Albuquerque, NM: The University of New Mexico Parent Development Center, 1980.
- Krohn, B.L., Weisig, R.J., & Staples, J.M. Teacher application of behavior principles in home and classroom environments. Focus on Exceptional Children, 1979, 1, 1-14.
- Leithan, G.L. A systematic social approach to teaching parents to train preschool socially retarded children (Utah State University, 1979). Dissertation Abstracts International, 1979, 22, 2441-d.
- Leithan, G.L., & Macfarlane, A. A mediated training program for parents of the preschool socially retarded. Exceptional Children, 1973, 18, 872-873.
- Levin, A.B. The impact of parent effectiveness training on parent attitudes and children's behavior (University of the Pacific, 1979). Dissertation Abstracts International, 1979, 19, 7245-k.
- Loew, R.B. Parental attitudes toward exceptional children. Springfield, IL: Charles C. Thomas, 1978.
- Lubin, E. Children, parents and relaxation tapes. Academic Therapy, Fall 1978, 12, 109-113.
- Mahon, G.E., & Mahon, G.E. Parents, children, discipline: A practical approach. Boston. Allyn and Bacon, 1973.
- Mallinckrodt, A.J., Haines, E.M., & Lei, T.J. Patterns of social interaction among families of behaviorally retarded children. Journal of Marriage and Family, 1973, 15, 91-100.
- McDonald, J.D., Blatt, J.P., Gordon, S., & Hartman, S. An experimental parent-assisted treatment program for pre-school language-delayed children. Journal of Speech and Hearing Disorders, 1974, 11, 295-405.
- Robbins, E.J. Group counseling with underachievers and their parents. The School Counseling, 1968, 14, 18-25.

- Schumer, G. Psychological statistics. New York: Wiley, 3rd ed., 1963.
- Miller, J.B. Structured training with parents of emotionally handicapped children. ERIC Document Reproductions Service, 1974, ED 122827.
- Myers, E.V.F., & Young, C.C. Parental attitudes and the conditioning treatment of childhood enuresis. Behavior Research and Therapy, 1974, 12, 187-199.
- Narney, J.M. Parent training in problem behavior management with mentally retarded children. Utah State University, 1970. Disabilities Abstracts International, 1972, 22, 1214-8.
- Nance, J.R. Living with a child who is mentally retarded. American Journal of Social Rehabilitation, December 1979, 2, 183-188.
- Nelson, J.M. The effectiveness of education parent and teacher study groups in changing child maladaptive behavior in a positive direction (The University of Wisconsin, 1980). Disabilities Abstracts International, 1980, 41, 681-6.
- Neuhauer, C.J. The development of a curriculum design for parent education in early childhood (Northern Illinois University, 1976). Disabilities Abstracts International, 1978, 28, 8218-2.
- Owman, J.M. Effects of a parent education program upon parental acceptance, parents' self-esteem and perceptions of children's self-concept (North Texas State University, 1974). Disabilities Abstracts International, 1974, 25, 5218-2.
- Parent Education Exceptionalities Project Developmental Plan. 1984 Title IV-C, Florida Department of Education, October 1978.
- Peters, M.A., & Stephenson, M.F., Jr. Parents as partners in a program for children with oral language and reading disabilities. Teaching Exceptional Children, 1978, 11, 44-45.
- Patris, F.A. Teaching parents to teach their children to read: the effects of an instructional program (The University of Arizona, 1970). Disabilities Abstracts International, 1980, 22, 3742-2.

- Pierce, R.H. Operant conditioning: Its efficacy in affecting the verbal behavior of young children with severe language disabilities. Psychological Abstracts, 1974, 21, 1491-a.
- Pirry, F.F. Adherence counseling for parent education: ERIC Document Reproduction Service, 1973, ED 019478.
- Pless, D.W., & Harris, P.S. The Piers-Harris children's self-concept scale. Nashville, TN: Columbia Recordings and Tapes, 1977.
- Quarton, C.A. Alternative delivery formats for parent education programs (The Pennsylvania State University, 1974). Dissertation Abstracts International, 1974, 21, 1428-a.
- Rogers, A.J. Parent education with families of children with extreme reading problems (University of Oregon, 1971). Dissertation Abstracts International, 1973, 21, 1497-a.
- Spyrk, D. Cognitive behavior modification- Activated learning reading treatment with parents as therapy teachers. Psychological Abstracts, 1968, 21, 1481-B.
- Stehling, E.A., & Menden, J.C. Home instruction utilizing teacher-aids with academic high-risk preschool children. Psychology in the Schools, 1978, 21, 429-433.
- Steinberg, E., Friedman, R.S., & Portney, E. Training parents of brain-injured children in the use of operant conditioning. Behavior Therapy, 1978, 1, 4-12.
- Schiffman, R.H. A comparison of two parent education programs: Parent effectiveness training and behavior modification and their effects on the child's self-system (University of Northern Colorado, 1974). Dissertation Abstracts International, 1974, 21, 1497-a.
- Shearer, M.S., & Shearer, D.R. The portage project: A model for early childhood education. Exceptional Children, 1972, 24, 214-227.
- Simpson, S.J. The parent as change agent for problem behavior (University of Southern California, 1976). Dissertation Abstracts International, 1977, 24, 1428-a.

- Karman, M.S., & Pappis, M.D. School Psychology Review, Winter 1983, 12, 19-24.
- Kanner, E.F. Verbal Learning. New York: Appleton-Century-Crofts, 1957.
- Kobasa, M.F. An interpersonal-cognitive problem-solving approach to parenting (University of California, San Diego, 1979). Dissertation Abstracts International, 1980, 20, 1813-A.
- Kovacs, M.A. Comparative effectiveness as learning disabled children of three short-term parent counseling approaches (University of Southern California, 1978). Dissertation Abstracts International, 1979, 19, 198-A.
- Statler, L. Handicapped students see new gains: Florida School, 1978, 14.
- Kovacs, M.A. An effective-cognitive group counseling procedure for use with parents of handicapped children: A comparative study of its effectiveness for changing attitudes and learning parents in a method of child guidance (North Texas State University, 1978). Dissertation Abstracts International, 1979, 19, 4187-A.
- Kumstlich-Schwinger, M.S. The effect of parental participation in a systematic training for effective parenting group on a child's self-concept (University of Houston, 1974). Dissertation Abstracts International, 1975, 15, 4128-A.
- Thomson, E.A.S. The effects of a learning workshop on the information and attitudes of parents of learning-disabled children. ERIC Document Reproduction Service, 1978, ED 137783.
- Towse, S.L., Vogel, E.M., Peterson, E.F., & Morrison, E.C. Mothers as behavior therapists for their own children. Behavior Research and Therapy, 1983, 21, 123-124.
- Vukobrat, C. Language growth in head start children. Exceptional Children, 1974, 41, 177-189.
- Wahler, S.G., Winkler, C.E., Peterson, E.F., & Morrison, E.C. Mothers as behavior therapists for their own children. Behavior Research and Therapy, 1983, 21, 123-124.

- Wolter, E.S. Studies involving parents of children with communication handicaps. Child Psychology, 1974, 2, 25-28.
- Werry, J.E., & Wolkenhuth, J.P. Behavior therapy with children: A broad overview. American Academy of Child Psychiatry Journal, 1987, 2, 118-128.
- White, J.E. An assessment of the effects of a short-term parent education program upon parental knowledge and attitudes toward child development, learning and behavior (North South State University, 1974). Dissertation Abstracts International, 1974, 13, 37607R.
- White, T.B. Training parents in a group situation to use behavior modification techniques to reduce frequency of maladaptive behavior in their learning disabled child (The Ohio State University, 1973). Dissertation Abstracts International, 1973, 12, 1774-6.
- Whittemay, S. Transactional analysis: A theoretical position as an aid in parent counseling. ERIC Document Reproduction Service, 1967, ED 048324.
- Williams, S., Sawyer, W., Long, E., & Blagman, F. Special parents need special parenting. Unpublished paper presented at the Florida Council for Exceptional Children Convention, Orlando, Florida, October 1978.
- Wilson, W. Parent training: Some observations. Academic Therapy, 1978, 23, 42-52.
- Wolf, M., Fisher, T., & Mees, E. Application of spaced conditioning procedures to the behavior problems of an autistic child. Behavior Research and Therapy, 1969, 7, 105-112.
- Wolfensberger, W. Overcoming the parents of the retarded. In S.A. Knicker (ed.), Special Parenting. Chicago: Aldine Publishing Company, 1967.
- Worshel, T.L. Attitudes of parents toward mentally retarded children. Unpublished Master's Thesis, University of Texas, Austin, 1958.
- Worthington, E.E. & Sanders, J.B. Educational evaluation: Theory and practice. Belmont, CA: Wadsworth Publishing Company, 1973.

Halberstam, J., Soper, S.E., & Klein, H.W. Modification of a child's positive behaviors in the home with the mother as therapist. Journal of Applied Behavior Analysis, 1968, 1, 43-51.

Simon, A.W. Parent training: The effects upon parents' attitudes and the behavior of their normally or profoundly retarded children (Thesis, University of Maryland, 1970. Education Abstracts International, 1970, 12, 5435-6)



#### BIOGRAPHICAL SKETCH

Stephen Leslie Leppitt was born on July 12, 1948, in Jackson, Tennessee. He grew up in Gainesville, Florida, and graduated from Gainesville High School in 1968. He received his B.S. degree in political science from the University of Florida in 1970, and was elected to Phi Kappa Phi and Pi Sigma Alpha national honorary societies. After serving two years in the Army, he returned to the University of Florida and received his M.Ed. in exceptional education in 1972.

Dr. Leppitt has been employed by the Orange County Public School System since 1972, first as a teacher of emotionally disturbed and artistic children and later as an exceptional education consultant. He is presently an administrator working with parents of handicapped children. He is a member of numerous professional organizations including Phi Kappa Phi and the Council for Exceptional Children, where he served as chapter president in 1978. Dr. Leppitt lives in Homestead, Florida, with his wife, Penny.

I certify that I have read this study and that it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.

  
Paul S. George, Chairman  
Faculty of Central  
Teaching Association

I certify that I have read this study and that it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.

  
Charles Collins  
Professor of Instructional  
Leadership and Support

I certify that I have read this study and that it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.

  
Gordon Lawrence  
Professor of Instructional  
Leadership and Support

I certify that I have read this study and that it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.

  
\_\_\_\_\_  
John R. Connerly  
Associate Professor of Educational  
Administration and Supervision

I certify that I have read this study and that it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.

  
\_\_\_\_\_  
Arthur E. Glass  
Associate Professor of  
Instructional Leadership and  
Support

This dissertation was submitted to the Graduate Faculty of the Division of Curriculum and Instruction in the College of Education and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Education.

May 1993

\_\_\_\_\_  
Dean For Graduate Studies  
and Research